THE

WESTERN JOURNAL

OF

MEDICINE AND SURGERY.

OCTOBER, 1841.

ART. I.—*A Memoir on the Treatment of Bubo.* By DR. MARCHAL (DE CALVI.) Translated from the French for the Western Journal, by THOMAS W. COLESCOTT, M. D., of Louisville.

The name of venereal bubo, or more simply and more generally of bubo, is given to acute or chronic inflammation of the lymphatic ganglia, arising from the venereal virus—an inflammation accompanied, when acute, with that of the surrounding cellular tissue.

The word bubo is derived from the Greek *Boubon*, which signifies groin. Among other inconveniences, it has that of making one suppose that the affection which it serves to designate is developed in the groin alone, whereas it may be produced, though rarely indeed, in other parts. However, as

a denomination is advantageous when its meaning is well-settled, and as that of bubo leaves nothing to be desired in this respect, it will in all probability be retained in the science to the exclusion of the term adenitis.

The following is a particular form of abscess, something like bubo, to which Hunter has drawn attention: Sometimes in consequence of ulcers or chancres existing on the glans or the prepuce, the lymphatic vessels of the penis inflame and appear under the form of hard cords, which are lost on the root of the organ, on the pubis, or in the inguinal ganglia. Hunter explained this phenomenon by the thickening of the parietes of these vessels, and the effusion of a quantity of coagulable lymph upon their inner surface. These vessels, thus inflamed and thickened, may suppurate in one or more points, and give rise to one or more abscesses. An analagous phenomenon occurs in simple angio-leucitis,* in which abscesses of greater or less size are observed to occur here and there, at those points where the inflamed vessels meet in great number and form a net work.

Hunter was acquainted with some very rare examples of bubo in the hollow of the axilla. He saw cases in which syphilis had been contracted by a sore or cut upon the finger. When this happens, if a bubo is formed, it occurs at the bend of the arm† or at the inner side of the biceps muscle, rather than in the hollow of the axilla. (S. Cooper.)

The groin being almost the exclusive, and in some degree the natural seat of the venereal bubo, it is to inguinal bubo that we shall confine our remarks. In the groin itself, the seat of bubo is subject to variation. Hunter observed one, in a male, situated very far outwards on the thigh; he has likewise noticed them above Poupart's ligament, and in the

*Inflammation of the lymphatic vessels: from *aggeion*, vessel, and *leakon*, white, the termination *itis* being added.—*Tr.*

†Cooper intends to say above the epitrochlea, or inner condyle, as there are no ganglia at the bend of the arm. (Our author has mistaken Cooper's meaning; his expression is: "a little above the bend of the arm, by the side of the biceps muscle, etc." See Dictionary of Prac. Surgery, by S. Cooper; art. Venereal Disease.—*Tr.*)

neighborhood of the pubis. It is an interesting remark, that neither the ganglia of the iliac region, nor those existing along the vertebral column, are ever affected with bubo, which is explained by anatomical reasons (vid. infra.)

In the female the seat of bubo, equally variable, is subordinate to that of chancre. This subordination, as indicated by Mr. Samuel Cooper, in a manner which might be more precise, is as follows: if the chancre exist near the meatus urinarius, the nymphæ, the clitoris, the labia, or the mons veneris, the bubo is found near the place where the round ligament passes out of the abdomen, sometimes lower down in the groin: if the chancre is situated lower down towards the perineum, the ganglionic inflammation manifests itself in the angle resulting from the junction of the thigh with the labium. It will be seen presently that a bubo caused by a pre-existing chancre, is a very rare occurrence. What becomes then of the subordination established by the English author?

Dr. Denis has seen buboes developed in the female, though rarely, at a greater or less distance down the thigh, within two or three fingers' breadth of the top of the member, sometimes in the course of the crural artery, at other times farther inwards.

The ganglia of the groin form a superficial and deep-seated group. Of the former, some receive the vessels of the external genital parts, and those which creep beneath the sub-cutaneous fascia of the abdomen; others, most of the superficial lymphatic vessels of the inferior extremity. Such of them as receive lymphatics from the parts of generation are situated in the fold of the groin or in front of the ligament of Fallopius; the others lower down and within. According to Prof. Velpeau, the former alone would be the seat of bubo proceeding from a virus absorbed by the lymphatics of the genitals. "The others do not swell except under the influence of a disease of the abdominal member." This disease may be a venereal ulcer between the toes; the bubo itself is then syphilitic. But does it never happen that the lymphatic vessels of the parts of generation, by some irregularity, go to the infe-

rior ganglia? and might not these then become the seat of bubo, in consequence of a virus absorbed by the vessels just named?

A distinction relative to the seat, for which we are indebted to Desruelles,* is that which divides buboes into superficial or supra-aponeurotic, and deep seated or sub-aponeurotic; it is important, particularly in relation to the prognosis, as a deep-seated bubo, in which the inflammation is confined by the aponeurosis, must give rise to more intense inflammatory symptoms than a superficial one.

This distinction is opposed to the following opinion of Velpeau:† "The deep-seated ganglia, to the number of three, four, or five, surround the femoral artery, are situated between the two lamina of the fascia lata, and communicate with the preceding (the superficial) by means of minute arteries, veins and lymphatic trunks. As these radicles ought apparently to transmit to the deep-seated ganglia the diseases of the others, it is remarkable that buboes should multiply beneath the skin, and remain there for a considerable time, without any being formed in consequence thereof in the crural canal." Notwithstanding this passage, as direct communications exist between the superficial and deep-seated ganglia, by means, too, of lymphatic vessels, it seems to us possible for the syphilitic virus to be carried from the genitals to the superficial ganglia, and from these to the deep-seated. We think, therefore, that the distinction of Desruelles is not impaired by the anatomical reasons that have just been discussed, and that it deserves to be retained.

We admit that the acute bubo consists rather in inflammation of the surrounding cellular tissue than in that of the ganglion itself. The inflammation of the latter is but the starting point and, if I may say so, the first stage of the bubo.

The following sentence from Velpeau expresses our tho'ts upon this subject very well: "There are two orders of patho-

*Traite pratique des maladies veneriennes: Paris, 1836, p. 527 et suiv.

†Anatomie Chirurgicale, 3d. edit., Paris, 1836, t. ii, p. 528.

logical phenomena. Some, primitive, the product of the specific cause, take place in the ganglia themselves; others, secondary, acting as if they depended on any other cause, have their seat in the surrounding cellular tissue."

It does not follow that the ganglion itself may not suppurate. But suppuration of the ganglion, in bubo, constitutes the exception. The general fact is inflammation and suppuration of the cellular tissue. Velpeau teaches that in cases of inflamed absorbent ganglia, the suppuration may take place, 1st. in the ganglion; 2d. in the cellular tissue subjacent to it; 3rd. in the cellular tissue found in front of it; 4th. in the whole surrounding cellular tissue; 5th. and lastly, at once before, behind, and in the ganglion, which presents a kind of canal through which the pus of the anterior part communicates with that of the posterior. The abscess then presents the form of one of those double buttons used to fasten shirts.

What is the mode, or rather what are the modes of production of the bubo?

A first mode admitted by Hunter is that in which the pus of a gonorrhœa or a chancre, applied to a healthy surface, does not produce any local effect, but is directly absorbed. This mode, according to Hunter himself, is extremely rare. We admit perfectly that a bubo may be thus directly formed, without any other venereal symptoms being produced; but we do not think that a bubo can ever be produced by the pus of gonorrhœa, so that we adopt the proposition of Hunter with a reservation.

The most frequent mode, and the one which constitutes the rule, is that in which a chancre has existed prior to the bubo, or that in which a chancre and a bubo are developed at the same time. In this last case, it is very evident there can be no relation of causality between the two. The mode of production is the same as above; only the bubo is accompanied with a chancre.

When the chancre has existed previous to the bubo, a question is presented: Has the chancre given rise to the bubo, or were the two symptoms, as in the preceding case, produced at

the same time, although one appeared before the other, a circumstance readily conceived, seeing that, to produce bubo, the virus had to pass through a certain extent of lymphatic vessels, whilst for the chancre no such thing was necessary! We think both circumstances may occur. However, if it is considered that, very frequently, the chancre which precedes a bubo is scarcely perceptible, that, consequently, it furnishes but a very small quantity of pus for absorption, supposing it to furnish any, it will be admitted that when first a chancre and then a bubo are formed after impure coition, they are most frequently a simultaneous effect, and not the effect of one another. It may be seen, from this, how rare consecutive buboes would be, that is to say, those produced by a chancre already existing in the same individual. To recapitulate, it seems to us the following propositions may be established relative to the production of bubo:

1. A bubo may be communicated directly from the male to the female and from the female to the male by the pus of a chancre, without any other symptom.

2. A bubo may be produced directly and a chancre be produced at the same time, so that they are manifested simultaneously, independently of each other.

3. A bubo may be produced directly, and a chancre be developed at the same time, independently of each other, in such a manner, however, that the chancre is manifested before the bubo.

4. A chancre may give rise to a bubo in the same individual.

Hunter, Assalini, and several other surgeons, have observed that mercurial frictions sometimes give rise to ganglionic engorgements in the inguinal region.

It is generally easy to distinguish the swelling produced by an inflammation of the ganglia of the groin from any other tumor of that region. Let us not forget, though, that this inguinal region, so interesting and so complicated in a surgical point of view, has been the seat of very serious errors. Cullerier, supposing that he was about to open a bubo, plunged

a bistoury into an aneurismal tumor. This is a case that Prof. Marjolin never fails to relate in giving the history of abscesses. The surgeon recovered from his surprise, but nothing was prepared for so dreadful an occurrence. The wound was plugged with charpie thrust into the cavity of the tumor, and a compressive bandage applied. The hemorrhage was arrested, and the surgeon was happy enough in saving his patient, who eventually got well.

In relation to herniæ, two things may occur: the bubo may be mistaken for a hernia, or a hernia be mistaken for a bubo. The first happened to Sabatier. The case was that of an officer who, after a violent exertion, had observed an indolent tumor appearing in the inguinal region, without any change of color in the skin; he had, besides, no suspicion of the venereal affection. Sabatier directed a truss to be applied; the symptoms became more decided, and the mistake was discovered. Here every thing had concurred to obscure the diagnosis. Should not the circumstance of the exertion have seemed decisive? We have said that in other cases, and more frequently, a hernia is mistaken for a bubo. The observation related by Louis, in his memoir on herniæ with gangrene, is well known. Dr. Burdin, the younger, (see the memoir of Dr. Mondiere, in the *Archives*, 2nd series, vol. iv,) has related the case of a man who carried in the groin a tumor that was unattended by any change of color in the skin, and was mistaken for a bubo by one of the most celebrated surgeons of the capital. Other physicians were not of this opinion; the patient, on his part, affirmed that he had not been exposed to the venereal infection. The tumor was opened; a worm and some fecal matter passed out. A case nearly similar to this is likewise reported by Mondiere, who says he had it from Dezeimeris. It will be observed that the error is not equally serious, to mistake a bubo for a hernia, or a hernia for a bubo. In the former case, the patient may be made to suffer by the application of a truss; but this is almost the only mischievous occurrence that can befall him. In the other, the tumor may be cut into, and a fold of intestine opened.

The possibility of such errors, and, above all, the fact that surgeons of the first merit have committed them, should put one on his guard. It is unnecessary ever to exaggerate the difficulties of diagnosis; for a person never should act lightly and without having reflected on the chances of error.

If, in most cases, it is easy for the surgeon to recognize that he has to deal with an engorgement of the inguinal ganglia, still it may be difficult to learn the nature of that engorgement. If a chancre exists, and there is at the same time inguinal pain, the question is not doubtful. If there is gonorrhœa, it may still be said that the patient was exposed to venereal contagion; the only point then will be to know if the bubo is of the same nature as when a chancre exists or has existed, a question which will be examined presently. If there is neither chancre nor gonorrhœa, and if the penis bear no cicatrix that would refer to the former existence of a chancre, it may be very difficult to come to a decision. We have admitted with Hunter, as the reader has already seen, the possibility of primitive buboes, but we assert that real difficulties attend the surgeon in their diagnosis. Often he will have a suspicion equivalent in his own mind to a certainty, and yet he dare not, he must not express it, for, despite all appearances, the charge he would bring against the patient might be unjust. Let us speak only of what takes place in a body of soldiery. When a man has been sent to the hospital on account of a venereal affection, at the time of his discharge, he is punished by being made to stand guard fifteen days;* sometimes indeed the punishment is more rigorous. This, it may be said in passing, is a statutory provision questionable in its justice, and liable to be impugned as to its results. It would seem that a man is sufficiently punished for his inability to resist the impulses of youth, by the sufferings he has experienced and by a long sojourn in a hospital. On the other hand, the measure in question remedies nothing; the officers

*The original runs thus: "*il est puni de quinze jours de consigne:*" it is not without some misgivings that I have ventured to translate it as above.—*Tr.*

who enforce it, do so merely in obedience to received orders, persuaded that the punishment inflicted is completely useless, useless for the individual, who will relapse as soon as he shall have the desire, and useless, by a still stronger reason, as an example. In short, not only is this measure ineffectual, it is likewise dangerous, because, to avoid being punished, the soldiers sometimes succeed, notwithstanding inspection, in concealing their disease, and treat their own cases, or abandon themselves to the rapacious ignorance of charlatans. Be this as it may, let us suppose that, in a soldier, who will be punished should his malady be pronounced venereal, an inflammation of the inguinal glands is developed, without there existing either chancre or gonorrhœa; let us suppose furthermore, of course, that the patient declares he has not been exposed to the contagion; how can it be affirmed that a bubo exists?

If it were true that bubo had no other seat than the ganglia in the fold of the groin and in front of Poupart's ligament, and that these could inflame under the influence of the syphilitic virus only, there would no longer be any question. But, on the one hand, we have seen that bubo may be developed lower down; on the other hand, nothing proves that the inguinal ganglia may not inflame from any other cause than the venereal virus, for example, in consequence of a prick of the foot; so that the difficulty remains the same. Happily it is rarely presented; the venereal bubo, without previous or concomitant chancre, whereby it may be known, being itself very rare.

The bubo caused by the virulent pus of a chancre, no matter by what mode in other respects it has been produced, differs essentially from that which may result from gonorrhœa. In the former case, there has been infection; it is a virus absorbed and carried into the ganglia, that has produced the disease: in the second, the ganglia have been irritated and inflamed through sympathy; it is irritation of the urethral canal that has produced the ganglionic inflammation in the groin, just as it frequently happens that a puncture of the fin-

ger is followed by the formation of a phlegmon in the axilla, beginning in the axillary ganglia. Both diseases are venereal, since, whether there was chancre or gonorrhœa, the cause was venereal; but one is venereal from its cause as well as from its nature, the other from its cause alone, and its nature is exclusively inflammatory.

Passing by the symptoms of bubo, which we suppose are known, we come to the treatment, in which we shall have in view exclusively the bubo essentially venereal, the bubo properly so called, that is to say, the one which results from the virulent pus of a chancre. It is necessary to bear in mind that there are always two elements in this bubo, the virulent and the inflammatory, which are the product of one another. It is useless to call in question one of these merely to admit the other. To see in a bubo none but the inflammatory element, is to see but half the disease; it is to recognize the effect to the exclusion of the cause. It is not more possible to deny the venereal virus in its results, than the spermatic liquid in its results. Syphilitic affections are propagated by means of their virus, just as the animal races are by means of the seminal liquor. It is in both cases the same power in a reproduction faithful to its primitive types.

Bubo is acute or chronic, openly inflammatory or indolent. The treatment differs in these two cases.

Treatment of the inflammatory or acute bubo.—The object of this treatment is to disperse, to break up the inflammation, or, the termination by suppuration being unavoidable, to evacate the tumor, and induce cicatrization of the wound. It is therefore abortive or curative.

Abortive treatment.—This should always be tried when the patient presents himself at a stage in which resolution is still possible. There is an idea among the vulgar that if a bubo be prevented from suppurating. the virus remains in the economy. This idea is not without foundation. When the surgeon, neglecting the generative element, essential to the bubo, merely combats the inflammatory symptoms, it is very possible that the virus will remain. It need not be said that

these are old doctrines unworthy of being revived. To determine inflammation, the venereal virus, like any other irritative agent, requires blood; if leeches are applied on the point where it has been carried, and if, by this means, aided by some others, it is deprived of the necessary sanguineous element, it will most assuredly remain inactive at the point indicated; but there is nothing to show it may not be absorbed, and exert its disastrous influence elsewhere. It is our opinion, therefore, that, whatever be the means locally employed, unless the mercurial ointment is applied by frictions, which will be considered below, recourse must be had at the same time to general remedies, capable of acting upon the secretions or in a specific manner, and thus of expelling or neutralizing the virulent principle. We do not believe that the eighth of a grain of the deuto-chloride or proto-iodide of mercury, for a fortnight, and the use of sarsaparilla for a month, can, in any case, produce bad results. On the contrary, we have seen the most advantageous alterations effected in the general nutrition under the influence of these remedies. Frequently, in patients submitted to their use, not only do the inflammatory symptoms diminish, but likewise the appetite augments, and very soon the plumpness becomes decided.

In a garrison where we were detached with a battalion, we treated, at the infirmary of the regiment, a number of buboes in the formative stage; and the following is the method pursued by us: deep cauterization of the chancre with the acid nitrate of mercury, repeated according to necessity; application of twenty leeches to the bubo; from the beginning, a pill containing one-eighth of a grain of the proto-iodide of mercury every evening, and a pot of the decoction of sarsaparilla every day. In other respects, the antiphlogistic regimen as long as the inflammatory symptoms lasted, then the ordinary regimen. This mode of treatment has succeeded perfectly in our hands.

If the inflammatory symptoms are not sufficiently modified by the first application of leeches, no fears need be entertained of repeating it one or more times, since if the local inflam-

mation does not succeed in resolving the bubo, it still serves to limit its extent and diminish inflammation.

The object in cauterizing is not merely to prevent the secretion of virulent matter by the chancre, but likewise to induce its prompt cicatrization. If, however, the chancre be pretty large and inflamed, cauterization must be laid aside, although it is more successful than one would suppose even in such as are inflamed.

After leeching, some surgeons advise the application of ice. In a case where it was of great importance that a bubo and a chancre of the prepuce should be got rid of as quickly as possible, we directed twenty leeches to be applied, and followed during two days by ice; the cure of the bubo was complete at the end of that time; the chancre, which was cauterized twice, did not heal for eight days. No conclusion should be drawn from this case, which is certainly exceptional. Dr. Denis has in several instances seen the symptoms exasperated under the influence of ice, and has renounced the remedy.

Hunter, in order to bring about the resolution of the bubo, employed mercurial frictions upon it. He thought that resolution depended on the amount of mercury that might be absorbed, and admitted that certain buboes were too little developed to take up a sufficient quantity. In this case, he advised the frictions to be extended to the thighs. The mercurial inunctions, according to him, cured at once the ganglionic inflammation and the general infection. Delpech was equally partial to the use of this remedy, which, however, is not now employed in France, at least not as a means of resolving the acute bubo, since, if it is capable of modifying the virulent element, it acts less promptly and much less surely against the inflammatory element, than local blood-lettings, in conjunction with emollient applications.

Simple vesication, as a discutient remedy, does not seem to us to be any more productive of advantageous results. We have seen a blister, applied to an inguinal bubo in an officer, bring on suppuration, though the tumor appeared to have a manifest tendency to resolution.

The only means of rendering the blister pretty certainly discutient or resolvent would be, perhaps, to make it of enormous size, like those long ago successfully employed by Prof. Velpeau at La Charité, and which he significantly terms *monster-blisters* (*'vesicatoires-monstres.'*) Otherwise, we do not hesitate to affirm that vesication, instead of being resolutive is essentially maturative. In no case ought the blister to suppurate. Indeed, if it is conceivable that an acute irritation, sudden and extended over the skin, could violently remove the inflammation of the sub-jacent ganglia, this is not understood of a deep and slow irritation like that of a suppurating blister, which is far more capable of producing an inflammation of the neighboring ganglia than of dispersing it.

Another discutient means has been indicated by surgeon-major Malapert and adopted by Dr. Renaud of Toulouse. It consists in the application of a blister the size of a three-franc piece, and dressing the denuded surface with a solution of the deuto-chloride of mercury. An eschar is formed the thickness of which, owing to the presence of a certain quantity of lymph, is greater than that of the portion of skin destroyed. Ricord has given to this method the name of *mediate cauterization.* It is extremely painful. There are patients who, with the utmost resignation, cannot keep the pledge saturated with the sublimate. Besides, the employment of this method leaves a very extensive, indelible cicatrix, an unwelcome result which the surgeon ought to use all his care to avoid. Lastly, it is often ineffective. In a number of cases in which it was tried at the hospital of Gros-Caillou, by Denis, and at the military Hospital, by Desruelles, it did not prevent the bubo from suppurating. Therefore, although it has obtained the sanction of Ricord, and originated with one of our most distinguished colleagues, we do not hesitate to give our verdict against a method which has the double inconvenience of being uncertain and very painful.

Many practitioners make use of compression after the inflammatory symptoms have been sufficiently modified. Dr. Denis frequently employs this means after one or two applications of leeches, and derives good effects from it.

Hunter, according to Mr. Samuel Cooper, (Dict. of Practic. Surgery, art. Syphilis,) was favorable to the use of emetics in the treatment of bubo, and accorded to them the power of resolving the ganglionic inflammation, even after pus was distinctly formed. We merely refer to this as the opinion of a great surgeon. In France, the tartarized antimony has never been applied to the treatment of bubo.

A last discutient remedy has been recently advised, and consists in multiplied punctures. The punctures with a lancet act, says Dr. Aubry,* like true local blood-lettings, by relieving the engorgement of the parts; accordingly there should be no fear of making them deep; experience indeed has demonstrated that it is important for the point to penetrate the ganglia, and divide the fibrous envelope. This means, since the notice of Aubry, has been tried by several surgeons, among others by Barthélemy, who has charge of the venereal wards in the military hospital of Picpus, and it seems to have been productive of good effects. The surgeon just mentioned is at this moment making trials upon a large scale. We cannot help thinking, however, leaving our opinion to be corrected by future facts, that punctures, as a means of procuring resolution, must be a less certain mode of treatment than that by antiphlogistics and specifics, to which, until more ample information is obtained, we give the preference.

Curative Treatment.—When the patient has been tardy in presenting himself to the surgeon. or when the means proper for arresting the inflammatory action have failed, an attempt must be made to moderate the inflammation and limit the suppuration.

It seldom becomes necessary to bleed individuals affected with bubo. Leeches, on the contrary, may, and often, must be employed, they having the power, more than any other remedy, of restricting the phlogistic effects of the virus. Cataplasms of ground flax-seed, or, if these irritate the skin, of bread and milk, should be applied lukewarm to the tumor. Rest in the horizontal posture, and flexion of the limb should

*Gazette Medicale. August 15, 1840.

be prescribed, especially if the bubo be deep-seated. The patient should use the tepid bath: local bathings, says Ricord, and this is likewise the opinion of Dr. Denis, are of very little service. In addition, mild purgatives ought to be used, according to necessity, so that the flow of venous blood in the parts around the pelvis may not be obstructed by the accumulation of fæcal matter. The patient should be put upon a mild diet. When nothing opposes, he should take daily a quart of the decoction of sarsaparilla.

Such, briefly, are the means to be employed until fluctuation indicates that pus has been formed to which it is time to give vent. Authors have established important rules respecting the mode of ascertaining the fluctuation.

In some cases, fluctuation exists at the centre only of the inflamed mass, and then it forms, according to the expression of Dr. Ricord, a sort of *artesian well.* A person may be deceived, though hardly if he has any experience, by the softness of the ganglionic tissue, and believe pus to be present when there is none. The quantity of matter that a bubo encloses is a frequent source of deception, as no one would imagine it to contain as much as it does, particularly when, being sub-aponeurotic, it spreads under the aponeurosis, and gains in breadth and depth what it lacks in heighth externally.

Let us suppose fluctuation to be well established. Hunter was for waiting until the skin became very thin, a precept that we cannot adopt; in fact, to wait until the skin is thinned, is to condemn it to inevitable destruction by ulceration, or by the means of art.

The moment having arrived to open the bubo, how is the operation to be performed? This leads us to speak of the method by punctures, pursued at the military hospital of Gros-Caillou, in the wards of Dr. Denis, the surgeon-major, one of those enlightened and conscientious practitioners whom it is necessary to make known, because they are too modest to reveal themselves. The note of Dr. Aubry apprises us that Cullerier has been employing multiplied punctures in the treat-

ment of bubo for a long time at the hospital *du Midi;* it is certain that this means has been used by Denis for at least fifteen years. The question of priority remains, therefore, in suspense.

In the beginning, Dr. Denis employs the antiphlogistic treatment, according to the intensity of the inflammatory symptoms. He has observed that mercury, during the period of irritation, had a great tendency to act upon the gums, and he abstains from its administration at that period. We ought to remark that we do not share the apprehensions of Dr. Denis in this matter, since, if the metal is employed with moderation, it is not difficult to arrest the untoward effects it may produce on the mouth, and besides, when it has been thus wisely administered, it very seldom occasions them.

The necessity of caustic generally betrays the surgeon, as it depends solely upon the extreme tenuity of the skin, a portion of which has to be removed, and as this tenuity itself results from the delay in opening the abscess. The application of caustic creates a considerable sore, which is slow to heal, and, after recovery, leaves a much more striking cicatrix than when a cutting instrument has been employed. The latter, therefore, unless from timidity on the part of the patient or extreme thinness of the skin, should be preferred to the caustic.

Now, how should the bistoury be used in opening a bubo? An aperture of greater or less extent is generally made along the bend of the groin, or in the vertical direction, as Velpeau often makes it, and in our opinion more rationally. When the bubo is of small size, it is recommended to practice a simple puncture. But the cases in which this is possible are rare. Frequently when this has been done, the pus has been known to stagnate and detach the adjacent parts. The most frequent practice consists then in making an incision of greater or less length, sometimes very extensive; now experience proves that incisions of this kind, although far preferable to the caustic, require a long time to cicatrize, often render excision of the edges of the wound necessary, and leave a very

marked cicatrix, all of which inconveniences the process employed by Dr. Denis is designed to avoid. This process is as follows:

Instead of a single very extensive incision, he makes several punctures, the number of which varies from two to three or four, according to the extent of the tumor, and what is important to notice, corresponding to the extremities of the bubo, so as to give exit to the pus at the moment it is about to spread among the adjacent parts and detach them. If the bubo does not exceed the ordinary size, he is satisfied with two punctures at the extremities of its greatest diameter; if it is very considerable, he makes one or two others at the extremities of the opposite diameter. During the first few days, some bits of charpie are introduced into the small openings, to keep them from closing. In those very rare cases in which a single puncture will suffice, Dr. Denis acts in the ordinary manner. It is proper to make the punctures perpendicular or oblique in reference to the fold of the groin, as is done by Cullerier.

The punctures being disposed at the extremities of the bubo, a slight pressure at the centre suffices to evacuate it, and the skin is not involved at the point where it is thinnest, and where there is most need of preserving the vessels; from this two-fold circumstance results an easy detergence and the prompt re-attachment of the fundus of the abscess to the teguments which have retained their vitality, so that, finally, complete cicatrization ordinarily occurs from eight to ten days after the operation. A striking advantage, the greatest perhaps attached to the multiplied punctures, is that the cicatrices are scarcely discernible, often imperceptible. Indeed, it was in a great measure the desire to avoid, in females particularly, large and deep scars, lasting stigmas of shame, that led Dr. Denis to conceive this process.

The very simple method of operating just indicated might be very well applied, in a great many cases, to the opening of ordinary phlegmons, and we do not doubt that it will come into very general use.

A method that resembles the preceding as to its results, though it differs remarkably as to the means, is precisely that of surgeon-major Malapert, which has already been considered. When the blister is applied, and afterwards the solution of corrosive sublimate, in a case where suppuration takes place, small eschars are observed at the surface of the bubo that soon fall off, and leave openings through which the pus makes its escape. This mode of treatment has been particularly employed by Renaud, from whom it was copied by Vidal (de Cassis), who has frequently used it with success in the venereal hospital. Considered in itself, this method is advantageous; compared with the multiple punctures, it is much inferior. We have already said how painful it is.

Vidal, who has also employed the method by puncturing, has several times used the scarificator in practicing it.

Dr. Denis does not prescribe mercury to all his patients affected with bubo. In the administration of this article, he is guided by the aspect of the sore, its tendency to cicatrization, and the general health of the individual. Certainly there are buboes which heal perfectly without mercury: Hunter, who was a great partizan of the specific metal, admits this; we think, however, that there is more security in employing it in every case. We need not add, that when Dr. Denis makes use of the deuto-chloride of mercury, or the proto-iodide, which he prefers, it is always with the prudent reserve of a practitioner who is thoroughly acquainted with the medicine that he prescribes. The dose varies from an eighth to a quarter of a grain daily, and seldom amounts to half a grain. In females, it is most frequently limited to one-eighth.

The fault of the doctrine which proscribes this specific is in speaking as if the world had not profited by the experience of fifty years. At this day, no person abuses mercury. Why should any one be so obstinate as not to perceive it, and what is this strange mania of making war, like some famous knight-errant, upon excesses that have long been imaginary?

Treatment of the chronic or indolent bubo.—We shall be

brief in what remains to be said, as the task we proposed in the outset is fulfilled. The chronic or indolent bubo is primitive or consecutive. It is in this form that the repeated application of blisters is particularly efficacious. They act by inducing suppuration or resolution of the ganglia. Mercurial or ammoniacal frictions, emollients, douches, long walks, are so many means suitable to resolve indurated ganglia, or to inflame them and bring on suppuration. Compression, combined with vesicatories or irritating frictions, constitutes a mode of treatment by means of which we have seen Dr. Denis obtain the resolution of indolent buboes of considerable size. If the means thus rapidly pointed out do not produce the desired effect, inflammation may be directly excited by an issue of caustic potassa. The ganglia may also be excised, which is preferable, in imitation of Desruelles, and subsequently cauterized, or leeches may be applied after the excision, which ought to be tried first. Here again punctures are attended with beneficial results. "It is," says Aubry, "in cases of indurated chronic buboes particularly, that Cullerier advises the ganglion to be pierced deeply; this charge is important, and its omission may compromise the success of the method." It is sometimes necessary, in cases of this kind, to repeat the punctures. In this matter, we should be guided by the progress of the disease. Aubry cites three examples of very large buboes cured at the end of a month. It is probable that, from analogy, the multiple punctures will shortly be applied to scrofulous tumors.

Buboes are susceptible of several complications. A phlegmonous erysipelas may occur after the application of leeches. The surgeon now and then meets with individuals of a scrofulous constitution, in whom cicatrization proceeds with extreme slowness. Some buboes are accompanied with an ulceration truly phagedenic, a terrible symptom with which we saw a young soldier die at Val-de-Grâce, although he had been subjected to simple treatment. Finally, intercurrent diseases exert a great influence on the progress of the bubo. But these various complications do not enter into the plan we have traced out for ourselves.

ART. II.—*History of a case of Abdominal disease.* By WM. L. SUTTON, M. D., of Georgetown Ky.

Jacob Caplinger, aged 54, applied to me April 14th, 1838, to see if I could afford him any relief for a colic to which he was subject; and gave the following history of himself. He has been in bad health for several years, and is usually troubled with a costive state of the bowels. For the last year or two, he has had a tumor of considerable size in the left side of the abdomen. It commenced nearly equidistant between the navel and the short ribs; after remaining for some time, it disappeared from that place, and one was found in the left iliac region. At present it extends from the short ribs to near the pubis, where it terminates in an obtuse point, projecting to the median line. Just below the ribs is a point where there is an indistinct sense of fluctuation; bowels at present regular, but very subject to colic.

I did not see him again until the 20th of May, when he informed me that he had remained pretty much as when I saw him, until the 18th inst., when he was seized, at night, with considerable nausea and retching but no vomiting: he also belched up a considerable quantity of air. Soon after he fell asleep and enjoyed a tolerable night's rest, which he had not done for some time. The next morning he found the tumor had disappeared. Upon examination, I found the tongue tolerably clean, forward; but with a slimy fur towards the root; appetite indifferent, bowels very loose, dejections rhubarb-colored and very fœtid, urine high-colored, rather scanty and occasionally voided with great pain—respiration not oppressed—some cough—can sleep in a horizontal posture, which he had not been able to do for some time before the subsidence of the tumor; skin sallow and countenance indicative of suffering; abdomen somewhat distended and evidently containing a fluid; no appearance of the tumor, but, by pressing with some firmness in the left lumbar region, the edge of a solid body was evident, about two inches long; at this point

there was considerable tenderness as well as over the abdomen generally; lancinating pains in the right hypochondrium; pulse not deranged. He had travelled about forty miles in a carriage on that day, which he bore badly.

From the 23d to the 27th he passed not a drop of urine, neither did he have the least inclination to do so; and, although there was no fulness in the region of the pubis, still to leave no room for doubt, on the 25th, at night, a catheter was introduced, but no fluid followed. During this time his bowels were getting into a better condition, both as to quality and quantity of the discharges. The skin was becoming of a better hue, the abdomen was diminishing in fulness; the tumor in the lumbar region increasing distinctly in size. The pulse continued about 65, and was of good volume; respiration easy; some cough, and expectoration of a little dirty looking mucus. On 27th he passed urine in a moderate quantity, apparently containing albumen, which continued in a fair quantity.

June 7th. Since the last report the abdominal tumor continued to increase in size until it extended from under the ribs considerably into the iliac region, where it terminated in a rounded point, very much as it did when I first examined it: laterally, it projected considerably beyond the navel, the surface presenting a lobulated character. The tumor was not very painful on pressure; but there was some tenderness in the epigastrium, and in the right hypochondriac region. Upon examining the abdomen on the 7th, the tumor had lost about three fourths of its size since the preceding day, with an increase of fluid in the abdomen. The intestinal evacuations were of a good color and consistence, but offensive in odor; urine natural in color and apparently containing albumen; pulse ranging from 65 to 70; respiration natural; sleeps well. June 29th. Had continued to improve until three days ago. His complexion had cleared up; pulse good, with an occasional intermission; bowels in good order, except that the dejections were offensive; appetite fair, and sleep in general comfortable. Three days ago he had a chill, which was

said to have lasted two hours, after which there was some heat of the head and chest, with coolness of the hands and feet. Complexion became tawny, with an anxious expression of countenance; abdomen painful, and the next morning could not be moved without great pain, whereas he had sat up and walked about the house the best part of the previous day.—The bowels became loose; dejections light-colored and still more offensive. At present the equilibrium of the circulation is pretty well re-established; pain relieved, and sleep restored; but the bowels still deranged.

July 6th. Bowels have acted better; but the dejections still fœtid, and occasionally mixed with blood, (which comes from the lower part of the bowel,) and have been of proper color. Urine natural in color and quantity, without sediment. There is frequently considerable pain in the region of the bladder, on passing urine or fæces. At times complains of coldness of the right foot and leg. Pulse generally about 65, with an occasional intermission.

9th. The tumor for some days has had a very equivocal appearance. Lying in the track of the colon, its irregularities bear considerable resemblance to that bowel enormously distended: opposite the anterior superior spinous process of the ilium, it extends two-thirds of the way to the median line.

30th. Had continued to improve until a few days ago; his appetite was regular; digestion good; little eructation; fæces of good consistence, but still of an unnatural odor; skin rather dry; urine scanty; pulse 75 and pretty regular. Of late the tumor has increased in size and been more painful. The upper portion of the tumor extends across the epigastrium, and is uniform and hard; the lower portion reaches to the median line, and is uneven on its surface and softer, as if containing a fluid. Between these two portions is a depression. Lately, there has been an increase of fluid in the abdomen; also œdema of the feet. Yesterday, he was taken with an excruciating pain in the abdomen generally, and especially in the epigastrium, which was very tender to the touch, with inability to lie down for any length of time. [This inability to lie was

occasioned by that posture causing great pain, and not by its oppressing respiration, which was then, and has been unaffected by position.] Lips blueish, and countenance expressive of great agony, yet the pulse continued firm. He had several discharges from his bowels, more soft and bilious than usual.

August 7th. There is less tenderness of the abdomen, yet there is considerable flatulence and pain in the bowels, just before the expulsion of the contents of the bladder or rectum; at the same time there is considerable pain in the glans penis. The upper portion of the abdomen is tympanitic, but the air is presumed to be in the stomach and bowels, as there is considerable eructation. The lower portion of the abdomen evidently contains a fluid. Pulse less intermittent, also less uniform in strength: skin somewhat clammy. The tumor not perceptible, except in the lumbar region, where it is of the size of a small fist.

15th. The tumor now occupies the iliac fossa, extending up as high as the ribs, which permit it to be followed by the hand, and across the epigastrium: there is a fissure between the upper and lower portion, the superior being smooth and the inferior lobulated, as on several occasions heretofore. Abdomen at present contains little fluid. Pressure on the back part of the lumbar region gives considerable pain, which is also felt in the shoulder. Bowels for a few days have been disposed to diarrhœa.

From this time until the 29th, on which day he died, he gradually sunk; the bowels being irregular, occasionally disposed to constipation, then to diarrhœa, attended with much pain in defecation; pulse fluctuating but never very frequent.

Treatment.— On the 20th of May when I commenced treating the case, my first effort was to bring the bowels into a tolerable condition. This was attempted by a mercurial cathartic, followed by calomel, ipecacuanha and opium in small doses, thrice a day. Under this course there was a gradual, but a very decided improvement, and, with the exception of short intervals towards the latter period of the

disease, his bowels were in a very tolerble order, as to the quantity, consistence, and color of the discharges, which, however, always had an unnatural and offensive odor. For the suppression of urine, which lasted from the 23d to the 27th of May, various diuretics were tried, such as bals. copaib. and Venice turpentine, spts. nitr. dulc., and tr. canthar, &c., without any apparent effect. The secretion appeared to be re-instated by a blister over the kidneys. After this, and indeed, from the beginning, the treatment was varied to mitigate unpleasant symptoms, believing as I did, that the abdominal tumor was of the encysted kind and of course not to be reached by medical treatment.

The aggravation of symptoms which took place on the 29th of July, was caused by, or at least supervened very speedily upon, a brisk breeze accompanied by a heavy shower of rain, followed by a considerable fall of the thermometer, which had stood at 90.° He was at the time sitting between two doors, but he said there was not much of a current of air on him.

The following was my diagnosis, exhibited at the opening of the body, which was done in the presence of Drs. Barlow and Adams. "Abdomen containing a moderate quantity of turbid serum; the convolutions of the bowels attached by membranous adhesions; an encysted tumor occupying the left iliac, lumbar, and hypocondriac regions, pressing on the bladder and kidney; left lobe of the liver probably enlarged; mucous coat of intestines inflamed, perhaps exhibiting cicatrices of former minute ulcerations; kidneys diseased, perhaps, having a white deposite."

Autopsy.—Emaciation extreme; abdomen not prominent; omentum well down over the bowels, and adherent to them throughout, as also to the peritoneum; it and the bowels uniformly dark; bowels very much agglutinated by membranous adhesions; abdomen contained from three quarts to a gallon of fluid, of the color of Port wine, which was confined in the lower region of the cavity, and below the bowels, by the adhesion of the omentum to the peritoneum and to the bowels,

and by the intimate attachment of the convolutions of the intestines to each other; the bowels themselves of good calibre and empty. Occupying the upper part of the iliac region, and a considerable part of the lumbar region, was a tumor of the size of a child's head; in front, of cerebral consistence and color, while further back it was firm, but of the same hue. This tumor had a cyst in it, containing about a pint of fluid, in every respect like that contained in the cavity of the abdomen; its substance was the left kidney thus enormously enlarged and disorganized. Attached to the kidney, and apparently continuous with it, were one large and several small cysts, altogether containing about three pints of fluid. The large one held about a quart of fluid like that in the abdomen, mixed with considerable quantities of a substance resembling half putrid flesh. This mass extended from the pelvis to the diaphragm. The right kidney was rather pale and flaccid; the stomach contracted and apparently healthy; liver rather yellowish in color, of good size and appearance; spleen healthy.

REMARKS.

I have been induced to give the foregoing free, and I fear, tedious extracts, from my memoranda of the case, because it is universally confessed that there is great difficulty in forming a correct judgment of the nature and seat of abdominal tumors; and because in these, as in other matters in our profession, the surest way to form a correct opinion is, to attend to and record the symptoms during life, and then by examination after death, ascertain the state of the parts. In this way, we can form a much better judgment of the correctness of our views and of the fitness of our treatment; we shall occasionally also be enabled to detect a cause of erroneous diagnosis.

The first interesting feature which I shall notice is the disappearance of the tumor on the 18th May, and its diminution at different times afterwards, followed by an increase of fluid

in the abdomen, or rather its appearance there on the day above mentioned, for, upon my stating to him on the 20th that there was a quantity of water in the abdomen, he told me that a very respectable physician of Shelbyville, who had examined him on the 10th, (a few hours before he was attacked with nausea, &c.) told him explicitly that he had no fluid in the abdomen; and when I saw him in April, I certainly did not suspect him of being dropsical. Then this subsidence of the tumor and the effusion into the abdomen were clearly owing to a rupture of the walls of the sac. The sac was a thick, strong membrane, and after maceration in alcohol, exhibited a spot on the inner surface where there was an appearance of rupture, the inner layer being altogether shrunk to the size of a quarter of a dollar. Was the occurrence of nausea, retching, &c. on the night of 18th of May, the effect or cause of the discharge of fluid into the abdomen? or was it only a coincidence? Upon these points the patient could give no information, and every thing is left to conjecture. But the probability is, that it was only a coincidence, as no nausea, &c. attended the diminution which took place on the 7th June, and at other times, when I have little doubt that rupture of the sac took place.

2d. A total suppression of urine existed for four days, without his appearing to suffer any inconvenience. Not the least uneasiness or oppression of the brain.

3d. During this total suppression of urine, and whilst the intestinal evacuations were daily becoming less frequent, smaller, and more consistent, there was an evident diminution of the fluid in the abdomen, and that without any perceptible perspiration.

4th. The great pain, which was frequently felt upon discharging the contents of the bowels or bladder, most probably depended upon the tumor pressing on the parts concerned.

5th. The irregular knobbed-appearance which the tumor assumed towards the last, made me hesitate whether I had not mistaken the nature of the case, or at least whether there was not a vast accumulation of fæces in the sigmoid flexure

of the colon as well as higher up. It was only by reflecting that no scybala were passed, and that there was a decided diminution of the tumor without any increased discharge from the bowels, that cleared away these doubts.

6th. The post-mortem examination very satisfactorily explained why the upper portion of the abdomen was tympanitic and the lower dropsical, inasmuch as the fluid was confined in the lower portion by a very complete adhesion of the omentum to the peritoneum, and to the convolutions of the intestines, aided by adhesions among the latter.

7th. It is worthy of remark, that the sac, distended with fluid, on several occasions, presented more resistance than the encephaloid mass. At one time at least, if I had attempted to draw off the fluid by puncture, I should have plunged the trocar into the soft tumor, and not into the sac.

And lastly, we may remark the speedy growth of the tumor. On the 20th May it was scarcely if at all perceptible, and on 29th August it was as large as a child's head.

It will be observed that no mention is made of the condition of the mucous coat of the intestines. The color of the bowels externally was so dark, that we were under the impression at the time, that gangrene had progressed too far to admit of their being satisfactorily examined. I soon after changed my opinion, and thought that the color of the bowels was imparted by the fluid which was in the abdomen, and I therefore very much regret the omission.

It is probable that the agglutination of the peritoneum, the omentum, and the convolutions of the bowels, was the consequence of inflammation produced on the 29th July, by the sudden change of weather. After that time the fluctuation was confined to the lower portion of the abdomen, whereas before, when there was a quantity of fluid in the abdomen, fluctuation was general.

October, 1840.

ART. III.—*Observations on the Bloody Murrain of Cattle.* By JOHN WINANS, M. D., of Green County, Ohio.

From the formidable mortality occasioned by this disease among the cattle of this region, it has lately become a subject of interest. Formerly nobody paid much attention to it, except those who suffered from its influence. Now, however, the attention of the medical and agricultural community has become awakened to the importance of trying to discover the cause, that they may be enabled to prevent it, and thus save from destruction a vast amount of property.

What number of our cattle die from this disease, I am unable from any data in my possession to determine. Judging however from some observations in a section of the country devoted entirely to the raising of stock, I should say that the mortality annually is one in every twenty-five. Some seasons it is much greater. One man in our neighborhood, who generally keeps about one hundred head on hand, says that in one season he lost twenty-five.

Cattle of all ages do not seem equally liable to the disease. Sucking-calves do not have it at all; and it has seldom been observed in animals under one year old.

All observers agree that it seldom, if ever, occurs in animals that are *lean*. Its attacks are confined exclusively to cattle in good order, and fat cattle. So universally is this the case, that fatness is considered by some as a predisposing cause—by some as an indispensable condition of the system.

No period of the year is exempt from the disease, though its greatest ravages are made in the fall months. Males and females seem equally liable to it.

Symptoms.—Loss of appetite is generally the first manifestation of ill health. This is soon followed by thirst, and a contracted appearance of the whole body. This however may be common to it and other disorders. But infallibly manifesting the presence of the disease, are the *discharges of blood from the fæcal and urinary passages.* Often but little, and

sometimes no blood makes its appearance in the dejections from the bowels. The urinary organs on the contrary keep up a perpetual discharge of blood and urine, amounting sometimes to three or four gallons in twenty-four hours.

Prognosis.—This is universally bad. Few if any cases are known to have recovered after the disease had got complete possession of the system. Copious discharges of blood from the bladder are always regarded as fatal; for farmers, when they discover this, seldom make a remedial effort, but abandon the animal to its fate.

Cause.—Of the predisposing or exciting causes, nothing is certainly known. The proximate cause or pathology of the disease itself is, I think, now known, and consists in *inflammation of the kidneys*, which, if not arrested, terminates in *gangrene and death.* With a number of causes assigned for this disease by stock-growers, among the most popular of which was that of leeches (*flukes*) in the liver, I lately went to work and made a post-mortem examination of an animal that had died of a well-marked case of the disease.

The animal, a cow, four years old, and in fine order, was discovered to be unwell about a week previous to her death. The day before she died she discharged a quantity of blood from the anus and bladder—most copious from the latter.

On opening the thorax the right lung was discovered to be in a slightly inflamed condition. The thorax contained half a pint or more of blood and water.

Attention was next directed to the liver, where I expected to find leeches, (*flukes.*) Examining this organ carefully, I could discover none, nor any traces of primary disease. In the adipose matter surrounding the kidney I noticed a red discoloration denoting previous inflammation. Removing the upper portion developed it more intensely; and on exposing the right kidney it was found to be in a complete state of mortification, incapable of sustaining its own weight. The left was similarly affected though not so much softened and disorganized. The color of both was black, though the right was much the most so.

The bowels in the vicinity of the kidneys were much more inflamed than any where else, and that portion passing over the right kidney and terminating in the rectum, had its mucous surface inflamed, and it contained a quantity of the coloring matter of the blood in the form of paste.

The other organs of both abdomen and chest, appeared to have suffered from nothing but sympathy and juxtaposition. Externally there were some spots of ecchymosis, and the peritoneum had evidently suffered considerable inflammation.

The bladder contained half a gallon of fluid blood, which did not coagulate on cooling, and the mucous surface of the organ was inflamed.

The contents of the large and small intestines were but little altered from the natural healthy appearance, except that portion of them extending from the kidneys to the anus, which contained, as stated above, a quantity of the coloring matter of the blood of the consistence of paste.

Treatment.—According to these pathological views, the treatment of the disease should consist in *blood-letting*, and other antiphlogistic means.

October, 1840.

REVIEWS.

ART. IV.—*Statistical Researches relative to the Etiology of Pulmonary and Rheumatic Diseases, illustrating the application of the Laws of Climate to the Science of Medicine; based on the records of the Medical Department of the Adjutant General's office.* By SAMUEL FORRY, M. D., Medical Staff of the U. S. Army, &c. 1840, pp. 44.

The confederated colonies and the United States together, have had an army and a medical staff, for more than 60 years; and the officers of that staff have been stationed in almost every part of our widely extended country, from Passammaquoddy Bay to the Balize, from Jamestown to the Chippewa mountains, from Mackinas to Cape Florida. Thus dispersed, and generally surrounded by new objects, no other portion of the American profession have had opportunities equal to theirs for making new and interesting observations, on the influence of climatic and topographical peculiarities, on the constitutions, of at least one class of society—adult males. It must be confessed, however, that the aggregate of what they have contributed, is by no means worthy of them. For a long time pleasure and dissipation absorbed the time and attention of too many of these gentlemen, not less than their brethren of the line. We are happy to know, that for the last 12 or 15 years this dissipation, like that of the profession in civil life, has been steadily going out of fashion; and that

a spirit of professional observation, and habits of scientific inquiry, have, *pari passu*, sprung up. Much of this is, we believe, attributable, not merely to an abatement of army conviviality, but to the establishment at Washington, of the office of a Surgeon General; and the judicious arrangements of Dr. Joseph Lovell, who so long held that important station. Among these, was the order to keep meteorological registers at the different military posts. They were, however, by no means, supplied with all the requisite instruments; and hence but little exact information could be acquired, except on the temperature of those places. Under the direction of the present surgeon General, Dr. Thomas Lawson, these observations, for a period of 10 years, have been collected, arranged and published, under the title of Army Meteorological Register, no copy of which has, however, reached us. This labor was performed by Dr. Forry, and he tells us that after having performed it, he determined on preparing the little work we are now reviewing. It is based upon the tables of that Register, in connexion with the returns, in the Adjutant General's office, of the sick at the corresponding posts, through the long period just mentioned. As the title of the pamphlet before us indicates, our author has limited himself to pulmonary and rheumatic diseases, being those which, beyond all others, seem to depend most immediately on climatic influences. It is our design to make such an analysis of this work, as may be practically useful to our readers.

We have said that all the *exact* meteorological information presented, relates to temperature; nevertheless our author has united with it the element of moisture, although not in possession of any hygrometric tables.

If this continent were destitute of lakes, it might be safely affirmed, that in going from the sea board into the interior its climate would constantly become drier; but with a chain of deep and extended lakes stretching half across it, the humidity of the interior, in their neighborhood, is greatly increased, while at the same time they exert a decisive influence on the

extremes of atmospheric temperature along their margins. Under these views our author has established several general divisions of the United States; and recognized different systems of climate in each, founded on the relative distance from the sea and the lakes. His first general division, the northern, extends from Canada as far south as New York, in which, referring to moisture as well as heat, there are three varieties of climate, that of the New England coast, that near the lakes, and that remote both from them and the sea. The second, or middle division extends from New York to Savannah and westwardly to the Rocky Mountains; which division, being without lakes, has but two varieties of climate —the maritime atlantic, and the interior. The third or southern division, embraces, first, the delta of the Mississippi, with the gulf shore, to Pensacola; and second, the peninsula of East Florida, the whole of which is humid, and, in its temperature, under the influence of the sea.

The extreme range of the thermometer throughout all the systems of climate in the northern general division, are greater than in those further south, and the difference between the *mean* heat of the winter and summer is greater. But the mean summer and winter temperatures, in the same latitudes in this division, vary according to the nearness or remoteness of different places, to the sea and the lakes. Thus, places near the Atlantic and lake coasts, have not only greater humidity, but warmer winters and cooler summers; for the obvious reason, that masses of deep water do not become so hot in summer, nor cold in winter, at the surface, as tracts of continents, because from their agitation they are warmed to a greater depth. Therefore, the extremes of temperature are greater in the interior, between the lakes and the maritime coast and beyond the lakes, than elsewhere in this division.

The modifying influence of the sea coast compared with the region beyond the lakes, is exhibited in the following table. It presents an average of five years, calculated from the

data of two posts in each system of climate, the mean latitude of the posts on the ocean being 43°18', and that of those in the opposite locality, 43°10'.

Locality.	Latitude.	Mean Annual Temperature.	Range of the Thermometer			Winter.			Spring.			Summer.			Autumn.		
						December.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.
						33.20	24.18	26.45	34.21	44-76	55.37	63.26	68.96	67.43	59.85	50.42	39.73
						25.07	18.82	21.78	34.20	48.05	64.49	75.04	76.81	73.92	60.85	52.92	37.43
Sea-coast	43°18'	47°.19	98	-24	122	27.94			44.78			66.55			50.00		
Region beyond the Lakes	43°10'	48°.99	104	-30	134	21.89			48.91			75.26			50.40		

In the former, the mean temperature of winter is 6°.05 higher than the latter; that of spring is 4°.13 lower; that of summer is 8°.71 lower; and that of autumn 0°.40 lower. This contrast is more strikingly shown by comparing the difference in the mean temperature of winter and summer, it being on the sea coast 38°.61, and in the opposite locality 53°.37. It is thus apparent, that a classification of climates, having, for its basis mere latitude, is wholly inadmissible; for, although there may be little difference in the mean annual temperature, yet the distribution of heat among the seasons may be extraordinarily unequal.

These facts are still more strikingly illustrated in the following table, which exhibits a comparison between posts on the lakes and those of the same region situated beyond their influence.

Locality.	Latitude.	Mean Annual Temperature.	Range of the Thermometer.			Winter.			Spring.			Summer.			Autumn.		
						December.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.
						23.04	16.98	19.85	27.20	39.44	52.56	58.24	67.13	63.51	55.94	47.19	36.33
						18.07	13.74	20-35	31.90	44.81	62.42	71.53	76.49	72.07	58.47	50.81	36.31
Lakes	46°27'	42°.22	93	-26	119	19.96			39.73			62.96			46.49		
Remote from the Lakes	44°53'	46°.47	96	-26	122	17.42			46.38			73.26			48.53		

It thus appears that the winter of the former, notwithstanding it is 1°.46 north of the latter, has a mean temperature 2°.54 higher, whilst that of summer is 10°.40 lower. In the latter, the mean temperature of spring is 6°.65 higher, and that of autumn is 2°.04 higher. The difference of the mean temperature of summer and winter, making due allowance for difference of latitude, is even greater than in the comparison with the Atlantic coast, that of the Lakes being 43°, and that of the opposite locality 55°.84. In the former region, the prevailing weather is cloudy, and in the latter fair: thus, during the year the proportion of days is—

	Fair.	*Cloudy.*	*Rain.*	*Snow.*
Remote from lakes,	216	73	46	29
Lakes,	119	132	67	47

In the next or middle general division, there are, we have already said, but two varieties of climate, the humid of the sea shore, and the more arid of the interior. The whole of the middle zone, that in which we live, is characterized by variability, while its mean heat is greater, and the extremes between summer and winter less than in the preceding.

The third or southern division, is still less variable, its annual heat is greater, the mean difference between summer and winter is less, and the moisture of the climate like the maritime portions of the two preceding divisions is great.

Let us travel back, and traverse these zones from south to north, on two different paths, one extending from Key West, in East Florida, lat. 24° 33', through Savannah to Maine, lat. 43° 18' along the Atlantic coast,—the other, from the same Key, through Cincinnati, Ohio, to Fort Snelling on the upper Mississippi, in lat. 44° 53'. In ascending the former, every degree of latitude sinks the mean annual temperature about a degree and a half, but increases the difference between the mean heat of summer and winter about one degree and four tenths. In ascending the latter, each degree of latitude reduces the annual temperature, rather more, because we acquire an elevation above the level of the sea, and increases the difference between the winter and summer means, more than

two degrees. On both these paths, the occasional variations of temperature become more frequent, sudden and extreme as we advance north, and this, it is *probable*, at a greater ratio in the interior than on the sea-board. Hence it results that the region of the upper Mississippi, possesses a climate of lower mean temperature, and of greater extremes, than that of any other part of the United States, while it is drier than the sea-board or lake-shore, and not perhaps more moist than any other quarter.

From these data we perceive, that an individual who might sojourn on the sea-coast successively from Maine to Florida, would be acted on by a uniform quantity of moisture, but a constantly increasing degree of heat, and a regular decreasing extent and intensity of variation from heat to cold and cold to heat. And that another individual, who might sojourn progressively from Fort Snelling to Key West, would be advancing into a more humid climate, one in which the mean annual heat was increasing at a greater ratio; and the extremes between summer and winter, and perhaps the violence of the occasional variations, diminishing at a greater ratio still than on the sea-board.

Now the object of our author is to ascertain from the sick reports of different military posts, the influence of these modifications of two of the elements of climate, on the respiratory and fibrous organs, in other words, how far they cause or modify pulmonary and rheumatic diseases. He begins with *catarrh*, and presents the results of ten years observations, at forty-five military posts. As the number of troops was very different at different posts, and varied from time to time at each, he has very properly assumed one thousand as the mean strength, and presented the number of cases in comparison with that strength. We extract his table:

Ratio of Catarrhal Diseases.

Divisions.	Systems of Climate.	Latitude.	Diff. between the mean temp. of winter and summer.	Ratio treated per 1000 mean strength. First Quarter.	Second Quarter.	Third Quarter.	Fourth Quarter.	Annual result.
Sou. Mid. North'n.	1st Class. Posts on the coast of N. England,	43° 18′	38°.61	63	49	36	85	233
	2d Class. Posts on N. chain of Lakes, . . .	46° 27′	43°.00	90	68	50	96	300
	3d Class. Posts N. of l. 39°, and remote from the ocean and inland seas, ...	44° 53′	55°.84	175	120	86	169	552
	1st Class. From Delaware Bay to Savannah, .	37° 09′	39°.90	102	45	23	97	271
	2d Class. South-western Stations, ...	35° 47′	36°.83	122	61	33	78	290
	1st Class. Posts on lower Mississippi,* . . .	30° 10′	24°.39	92	34	26	60	218
	2d Class. Posts in Peninsula of Florida,	24° 33′	11°.34†	45	24	40	33	143
	Total,			689	395	294	618	

This table, which exhibits the annual and quarterly ratios of each system of climate, and serves to elucidate their relations and sequences, affords a beautiful illustration of the etiology of catarrhal affections as connected with the meteorological laws established. Take, for example, the northern division consisting of the first three classes:—On the New England coast, as the ocean modifies the atmospheric temperature the annual ratio treated per 1000 of mean strength, is as low as 233; on the great lakes, where a similar modifying influence is in operation, it is 300; whilst the third class, characterized by the extreme range of the thermometer, has a ratio as high as 552.

It appears from this table that moisture does not favor the production of catarrh—that the first and third quarters of the calendar year, generate nearly an equal number of cases, the first, however, the most—that either of them produces nearly as many as the intervening two quarters—that the second, comprising April, May, and June, originates fewer, than the succeeding three months, and that the proportion of cases diminishes as we advance from North to South, into climates where the annual temperature is greater, and the extremes between summer and winter less.

*For want of a better arrangement, Augusta Arsenal, Georgia, and Fort Mitchell, Alabama, have been included in this class.

†This result is obtained from the observations made at Key West. At Fort Brooke, Tampa Bay, it is 16°.02.

From the similarity, or, we should rather say, identity, of catarrh and bronchitis, the results here given are strictly applicable to the latter; and to what, in common parlance, is called broncial consumption. From these affections our author proceeds, to those of the serous membrane and parenchyma of the lungs. The following is his tabular view:

Ratio of Pleuritis and Pneumonia.

Divisions.	Systems of Climates.		Ratio treated per 100 of mean strength.				
			First Quarter.	Second Quarter.	Third Quarter.	Fourth Quarter.	Annual Results.
Nor. Mid. States.	1st Class.	Posts on the coast of New England,	12	11	8	10	41
	2d Class.	Posts on Northern chain of Lakes,	11	15	13	11	49
	3d Class.	Posts on north of lat. 39°, and remote from the ocean and inland seas,	14	11	7	12	45
Sou. States.	1st Class.	Coast from Delaware Bay to Savannah,	21	11	8	16	57
	2d Class.	South-western Stations,	46	18	10	20	92
	1st Class.	Posts on the lower Mississippi,	20	9	4	11	44
	2d Class.	Posts in the Peninsula of East Florida,	14	9	8	6	30
		Total,	138	84	58	86	

It appears from this table, *first*, that the number of cases of catarrh and bronchitis is more than five times as great (5.42 to 1.00) as the number of cases of pleurisy and pneumonia: *second*, that the fourth quarter of the year, which produces nearly as many cases of the former diseases as the first, scarcely produces more of the latter, than the second and third; but that the first originates an extraordinary number. In the table on catarrh, the proportion of cases in the first to the fourth, is 689 to 618. In the table on pleurisy and pneumonia the numbers are 138 to 86. Taking the two together, the proportion of cases of these different affections generated in the first quarter, compared with the fourth, is as 827 to 704 —from which it is clearly manifest that the change from cold to warm weather, or the vicissitudes of spring, are more productive of pulmonary inflammation, than those of autumn, or the transition from hot to cold weather, which we think is contrary to the common opinion; and seems to show that cold generates a phlogistic diathesis. *Third*, these tables show

that pleurisy and pneumonia, unlike catarrh and bronchitis, are not more common in the interior than on the seaboard and lake shore. Thus if we add together the cases which occurred in the north general division, at the posts, upon the two former, they make 90, while those which occurred at the posts beyond the lakes made 45—just half the number. *Fourth*, it is singular that on the lake shores, the second and third, or the hot quarters of the year, are more given to pleurisy and pneumonia than the first and fourth, in the proportion of 28 to 22, while catarrh is more frequent in the latter than the former, in the proportion of 186 to 112. *Fifth*, these tables show us, that while long continued cold and great contrast of the seasons, predispose, relatively, more to bronchial affections, long continued heat predisposes, relatively, more to pleurisy and pneumonia. Thus while the proportional number of cases of the former compared with the latter, on the posts of the upper Mississippi, is as 552 to 45—the proportional number, at the posts on the Arkansas and Red River, is but as 290 to 92; and when we compare New England with East Florida, a similar result is obtained, for in the former, catarrh and bronchitis stand to pleurisy and pneumonia, as 233 to 41; but in the latter, only as 143 to 39; and while the posts on the lower Mississippi and gulph coast, are less subject to catarrh, than the shores of the lakes, they are almost as liable to pleurisy and pneumonia. Why long continued heat should abridge the liability to mucous inflammation, at a greater ratio than that to serous and parenchymatous inflammation, we do not pretend to know. We may doubt, however, whether these returns possess very great exactness. The word pneumonia, often expresses nothing more definite than the phrase inflammation of the lungs. An inflammation of the bronchial membrane, generally spreads into the adjoining cellular tissue, and *vice versa*. In many cases the signs of both affections are present; in others the diagnostic symptoms of neither are made out; the inquiries of the physician going no farther, than to determine the existence of pulmonary inflammation; which may be bronchitis or pneumonia, or both combined.

Dismissing these affections we come to phthisis; and here again we may doubt whether the cases reported under that head, are all tuburcular, as chronic bronchitis, pleurisy, and pneumonia, so often simulate that specific malady. We extract the tabular view:

Ratio of Phthisis Pulmonalis.

Divisions.	Systems of Climate.	Ratio treated per 1000 of mean strength.				
		First Quarter.	Second Quarter.	Third Quarter.	Fourth Quarter.	Annual Results.
Sou. Mid. North'n.	1st Class. Posts on the coast of New England,	2	3	2	3	9*
	2d Class. Posts on Northern chain of Lakes,	3	2	2	2	9
	3d Class. Posts north of lat. 39°, and remote from the ocean and inland seas,	2	1	1	1	5
	1st Class. Coast from Delaware Bay to Savannah,	4	5	2	3	13
	2d Class. South-western stations,	3	3	4	2	11
	1st Class. Posts on the lower Mississippi,	3	3	2	2	9
	2d Class. Posts in the Peninsula of East Florida.	2	2	2	2	9
	Total,	19	19	15	15	

The *first* remark we make on this table is, that the influence of the seasons is less perceptible, than in the other pulmonary affections, and that the former half of the calendar year occasions a greater number than the latter. The *next* is, that the region beyond the lakes, where the cold is greatest, the contrast of the seasons most violent, and catarrh most prevalent, phthisis is rarest. The *third*, that this disease prevails, relatively, most in the middle grand division, between the latitudes of 31° and 39°. The *fourth*, that on the whole it appears to be more frequent near the water than remote from it. The *fifth*, that it is as frequent in the south as the north—on the peninsula of East Florida, as on the coast of New England, or the Lakes. Results so different from our preconceived opinions might astonish us, if we did not remember, that these observations were made on troops which have been largely recruited in the north, and transported to

*As fractions are not given, and as the mean strength of each quarter varies, the annual results do not always correspond with the total of the quaterly ratios.

the south, taking with them a predisposition to the disease: but while we recognize this fact in favor of southern climates, we cannot shut our eyes to another, which is, that going to the south when predisposed to consumption does not, of course, avert the development of the malady. Our author is even of opinion, that the febrile diseases of the south tend to develope tubercle. This is doubtless the case in those, who go from the north, predisposed to that heterologous secretion; but facts are wanting to show that malaria, or the acute diseases arising from it, can generate a tubercular diathesis.

The work before us presents a tabular view of the relative mortality, from different pulmonary affections, in the great climatic divisions, which we shall pass over, as their mode of termination is so much modified by the treatment, which, not being given, is not before us. On the whole we may, however, admit with our author, that these diseases, when they do occur, are more complicated and fatal in the south than in the north; and that many persons laboring under chronic pulmonary affections, have their lives shortened, by attempting a *permanent* residence in a hot climate. Their constitutions are enfeebled by the long continued action of a hot atmosphere, laden with miasmata, to neither of which had they been accustomed. But, in which of the different forms of pulmonary disease, is a sojourn in the south most beneficial? If we may judge by the foregoing table, in the bronchial—in catarrhal consumption or chronic bronchitis. For, compared with pleurisy, pneumonia and phthisis, catarrh is less frequent in the south than in the north. He then, and he only, who has a bronchial or laryngeal consumption, should expect to be cured by going to the south; and even he should not remain there in the summer, but seek a cooler climate, and a purer air. Aged persons who are liable to winter coughs, with dyspnœa, stricture and copious expectoration, would be particularly benefitted by escaping from the north in October, and not returning till May.

But where within the United States should they go? May they stop in South Carolina, Georgia, Alabama, Mississippi or

Louisiana? We think not. The vicissitudes in winter are too great; the depression of temperature for short periods often too low; the number of cold rains too many; the domestic means of protection against a damp and chill atmosphere too few and incompetent, to render a winter sojourn within the limits of those states, efficient, as a means of cure. We admit that in reference to climate only, *something* may be gained, by those laboring under bronchial affections, but in numerous cases it is fully counteracted, by sinister influences, from which the patient would be exempt if he had remained at home.

It is only on the peninsula of East Florida, far south, in the latitude of 26° or 24°, that a climate is found of sufficient elevation and constancy of temperature, to exert a really curative influence. Whatever may be the humidity of the air in that latitude, it is always mild. There is, indeed, but little difference between summer and winter. Sudden and violent changes of temperature are unknown, and the atmosphere is always soft and balmy. But in reference to the fitness of this climate for invalids we must let our author speak for himself.

In treating of the climate of Florida, the primary object held in view is, to direct attention to its fitness as a *winter* residence for northern invalids. In 1833, Professor Dunglison called the attention of the profession, on the strength of the meteorological registers kept by the medical staff of the army, to the suitableness of St. Augustine and Tampa Bay as a winter retreat. An examination of abstract No. 2, of Appendix, showing—1. The mean temperature of each month, each season, and the whole year; 2. The difference between the mean temperature of each month and season; and 3. The annual and monthly ranges of temperature—will, it is believed, not only furnish further confirmation of the doctrines already conclusively established, but lead to results of great value to the practical physician.

The results of the four posts in abstract No. 2 of Appendix, illustrate the modifying agency of large bodies of water. Fort King, situated in the interior, has a warmer summer and a colder winter than the remaining stations, all of

which are on the coast. Athough Key West is 4°39' south of Fort King, and has a mean temperature of 3°.43 higher, yet the mean summer temperature is 2°.81 lower. The equalizing influence of the ocean is still further shown by the annual range of the thermometer, the mean of the monthly ranges, and the mean difference of successive seasons. During the summer months, the morning and evening observations are nearly the same at both points, the disparity being caused by the exalted temperature of Fort King at mid-day. In each year, July was the hottest month at Key West, and the month of June at Fort King. As is usual in southern latitudes, there is little variation presented at Key West in the mean temperature of the same month in different years.

There is little difference between the thermometrical phenomena presented at Key West and the Havanna. Within the period of six years, (from 1830 to 1835 inclusive,) the mercury at Key West was never known to rise higher than 90°, nor sink lower than 44°.

The peculiar character of the climate of Florida, as distinguished from that of more northern latitudes, consists less in the mean annual temperature than in the manner of its distribution throughout the year. At Fort Snelling, Iowa, the mean temperature of winter is 17°.29, and of summer, 72°.80, whilst at Fort Brooke, Tampa Bay, the former is 65°.02, and the latter 81°.04 and at Key West, 70°.05 and 81°.39. Notwithstanding the winter at Fort Snelling is 52.76 colder than at Key West, the summer, at the latter is only 8°.59 warmer. In like manner, although the mean annual temperature of Petite Coquille, La., is nearly 2° lower —that of Augusta Arsenal, Ga., nearly 8°—and that of Fort Gibson, Arkansas, upwards of 10° lower than that of Fort Brooke; yet at all, the mean summer temperature is higher. Between Fort Snelling on the one hand, and Fort Brooke and Key West on the other, the relative distribution of temperature stands thus:—Difference of the mean temperature of summer and winter at the former 55°.51, and at the two latter 16°.02 and 11°.34; difference of the mean temperature of the warmest and coldest month, 61°.18 compared with 17°.68 and 14°.66; and the mean difference of successive months stands as 10°.20 to 2°.97 and 2°.44. At Fort Snelling, the annual range of the thermometer is 116°, and at Fort Brooke and Key West it is 56° and 37°; and the mean of the monthly ranges bears the relation of 50° to 29° and 16°. The attention is thus directed merely to a few prominent points, as a reference to the tabular abstract will enable any one to

trace much farther this remarkable equality in the distribution of temperature among the seasons in Florida. A comparison with the most favoured situations on the continent of Europe, and the islands held in the highest estimation for mildness and equability of climate, affords results no way disparaging. A comparison of the mean temperature of winter and summer, that of the warmest and coldest months and that of successive months and seasons, furnishes results generally in favour of the peninsula of Florida. The mean difference of successive months stands thus:—Pisa 5°.75, Naples 5°.08, Nice 4°.74, Rome 4°.39, Fort King 4°.28, Fort Marion, at St. Augustine, 3°.55, Penzance, England, 3°.05, Fort Brooke, 2°.97, Key West 2.44 Madeira 2°.41. The mean annual range thus:—Fort King 78°, Naples 64°, Rome 62°, Nice 60°, Montpellier, 59°, St. Augustine 59°, Fort Brooke 56°, Penzance 49°, Key West 37°, and Madeira 23°.* The island of Madeira is esteemed by Dr. Clark as best adapted to consumptive patients.

In the West India islands the mean annual temperature near the sea is only about 80. At Barbadoes, the mean temperature of the season is—winter 76°, spring 79°, summer 81°, and autumn 80°. The temperature is remarkably uniform; for the mean annual range of the thermometer, even in the most variable of the islands, is only 13°, and in some it is not more than 4°.† Contrast this with Fort Snelling, Iowa, which gives a range of 116!

It has been seen that the meteorological agents which determine the ratio of pulmonic lesions, causing the first and fourth quarters to present the highest averages, and the third the lowest, is the marked distinction of season characterized by extremes of temperature. Hence the apparent exception to this rule in the system of climate pertaining to East Florida, where the third quarter has a higher ratio than the second or fourth, (see Table p. 21,) instead of contradicting a general law, corroborates it. As Florida is an ever-green land, the influence of the seasons does not impress the pulmonary organs sufficiently to derange their functions by their transition. Hence the ratio of pulmonic lesions is low; and as the causes which are secondary in excessive climates, grow here into primary ones, these diseases may be as rife in the summer as in the spring or autumn.

*Contrary to the numerical ratios furnished in his tables, Dr. Clark says that "the mean annual range of temperature is only 14°"—an error which has crept into the writings of Dr. Dunglison.

†According to the British army statistics.

The state of the weather as indicated by the course of the winds and the proportion of fair and cloudy days, calculated for the same years as abstract No. 2 of Appendix, is shown in the following table:—

Places of Observation.	Course of Winds.								Prevailing.	Weather.			Prevailing.
	N.	N.W.	N. E.	E.	S. E.	S.	S.W.	W.		Fair.	Cloudy.	Rain.	
	Days.	Days.	Days.	Days.	Days.	Days.	Days.	Days.		Days.	Days.	Days.	
St. Augustine,	1.55	2.86	9.08	1.03	10.83	1.11	2.64	1.33	S. E.	19.02	5.19	6.22	Fair.
Fort King,	1.62	2.79	3.46	3.54	4.37	5.63	5.96	3.08	S.W.	25.75	2.88	1.89	Fair.
Fort Brooke,	1.53	3.72	5.58	2.89	4.44	2.75	6.42	3.17	S.W.	20.33	4.47	5.64	Fair.
Key West,	3.20	3.13	10.50	5.37	5.37	0.54	1.67	0.38	N. E.	21.54	3.08	5.92	Fair.

The want of hygrometrical observations to indicate the actual or comparative humidity of the atmosphere is to be regretted. That the air is much more humid than in our more northern regions is sufficiently cognizable to the senses. The dews, even in the winter, are generally very heavy. To guard against the oxidation of metals, as for example surgical instruments, is a matter of extreme difficulty. During the summer, books become covered with mould, and keys rust in one's pocket. *Fungi* flourish luxuriantly. The writer has known a substance of this kind to spring up in one night, and so incorporate itself with the tissue of a woolen garment as to render separation impracticable. As general relaxation and lassitude are consequent on this prevailing humidity, it may exercise some agency in the production of the comparatively high ratio of pulmonic and rheumatic affections in the summer season. One of the best safeguards against its effects is, to wear flannel next the skin—a custom generally adopted in the army. It is, indeed, a hygienic measure no less valuable in warm than in cold climates, affording comparative immunity against thermometrical and hygrometrical vicissitudes.

As the rains, however, generally fall at a particular season, so the atmosphere in winter is comparatively dry and serene. The following abstract of the monthly fall of rain at Key West, is the mean result of five years observation:—

Jan.	*Feb.*	*March.*	*April.*	*May.*	*June.*	*July.*	*Aug.*	*Sep.*	*Oct.*	*Nov.*	*Dec.*	*Annual average.*
1.82	1.34	1.98	1.09	6.34	2.39	2.84	3.30	4.35	3.33	1.49	1.13	31.40

It will be observed that during six months, from November

to May, which is the longest period that a northern invalid should remain in this climate, the proportion of rain is but 8·84 inches. It has been already remarked that in tropical climates a portion of the year is known as the rainy season, and that the same quantity descends in a much shorter space of time than in the temperate zone; and that consequently the proportion of fair days and clear skies is infinitely in favour of the former. In the table of the weather just given, in which the ratios are monthly averages, this result is strikingly manifested. At Fort King, the annual number of fair days is 309, whilst on the northern lakes, it is only 119. On the coast of Florida, however, the average is not more than 250 days.

The influence of temperature on the living body is often indicated more accurately by our sensations than the thermometer. The advantages of climate as regards its fitness for the pulmonic, not unfrequently depend on the mere circumstance of exposure to, or shelter from cold winds. The frequency and severity of the winds at St. Augustine constitute a considerable drawback on the benefits of the climate. The chilly northeast blast, surcharged with fogs and saline vapours, sweeping around every angle of its ancient and dilapidated walls, often forbids the valetudinarian venturing from his domicil. To obviate these disadvantages, a large house was erected at Picolata on the St. John's; but during the pending Indian disturbances, it has been converted into a barrack and an hospital.

To persons labouring under an irritable state of the bronchial membrane, high winds are particularly injurious. If the consumptive invalid have much sensibility to harsh and keen winds, and if the immediate vicinity of the sea be known to disagree, Fort King ought to be recommended before St. Augustine or even Fort Brooke; but as sea-air is known to be generally adapted to a relaxed habit and a languid and oppressed circulation, a favorable position on the coast should, in such cases, be selected as a winter residence.

The natural advantages of position, without reference to extrinsic circumstances are now under discussion. St. Augustine is on the eastern coast; Fort Brooke is at the head of Tampa Bay,* about 30 miles from the Gulf of Mexico; Fort King is intermediate to these two points; and Key West belongs to the Archipelago south of Cape Sable. The pending

*The old Spanish appellation was Espiritu Santo, or bay of the Holy Ghost, the name Tampa being then restricted to an arm.

hostilities with the Aboriginies, and the difficulty of obtaining accommodations indispensable to the comfort of the invalid, render a winter retreat almost impracticable any where but at St. Augustine or Key West. The oldest town in the United States, and built mostly of a concrete shelly stone in the Spanish style, St. Augustine presents an antiquated appearance, enlivened by beautiful orange-groves bending at due season beneath their golden fruit.* The old Spanish fort and the *tout ensemble* of the city, give it more the resemblance of a place of defence than of elegance; but it is these circumstances which associate it with history, and render it peculiarly interesting to the American traveller. Moreover, the inhabitants extend kindness and hospitality towards strangers. Key West, about 60 miles southwest of Cape Sable, is two miles wide and ten long, and is remarkable as being the most southern settlement in the United States. Possessing a good harbor, it has been from time to time the station of our West India squadron. It contains about 1400 souls, and is a place of commerce chiefly in the way of wrecked goods.

In contemplating the scenery of East Florida in the month of January, one is apt to forget that it is a winter landscape. Fort Brooke on Tampa Bay is a truly delightful spot, in which tropical fruits flourish luxuriantly. The lime, the orange, and the fig find there a genial soil, whilst the moss-covered† live-oak and the Pride of China, add beauty and variety to the scene. Vegetation is continuous through every season, culinary vegetables growing in January; and the temperature of the waters in rivers and bays will admit of bathing in every month of winter. To the northern man, all nature seems changed. Even the birds of the air—the pelican and flamingo—indicate to him a climate entirely new. Having accompanied a boat expedition, the object of which was to explore the sources of the St. Johns, the writer found in the month of January, the high cane-grass which covers its banks intertwined with every variety of morning glory, (*convolvulus.*) The thermometer at mid-day, in the shade, stood at 84° Fahr. and in the sun, rose to 100°; and at night we pitched no tents, but lay beneath the canopy of heaven with a screen perhaps

*In 1835, nearly all the orange trees in Florida were destroyed by frost—an occurrence previously unknown in the memory of the oldest inhabitant.

†This parasite, (*Tilandsia usneoides,*) known by the vulgar name of Spanish moss, casts a sombre aspect over the scenery of Florida. Resembling the weeping willow clothed in the garniture of hoary age, it has been styled, not inappropriately, the shades of death.

over the face as a protection against the heavy dews. Notwithstanding the day attains such a high temperature, the mercury just before day-light often sinks to 45°, causing a very uncomfortable sensation of cold.

But there are other localities which combine advantages equally important to the pulmonary invalid. On the eastern coast of Florida, at New Smyrna for example, the warmth and softness of the air wafted from the isles of the West Indies across the gulf-stream, in the winter months, are truly grateful to the senses lulling them into repose. Even the virtuoso would not be without materials for contemplation; for here may be seen the ruins of Dr. Turnbull's colony of Greeks, Italians, and Minorcans—his unfinished castle, whose dilapidated and mouldering walls are covered with ivy, amid the luxuriance of the palm,* orange, mangrove, and magnolia. Cape Sable and the coast extending northward towards Key Biscayno, as well as the adjacent islands, would also afford an excellent winter retreat. Adapted to the cultivation of tropicoid fruits, and abounding in game, fish and turtle, this region, from the prevalence of the sea-breeze or trade-winds, presents a climate delightful even in the summer season. Key Biscayno, which is situated on the southeastern coast of Florida, affords an excellent harbor of safety and protection from the storms which frequently rage along the coast. The island is thus described by a medical officer of the army, when stationed there six months:—

"In the midst of summer, the constant prevalence of the sea-breeze renders it at all times delightful in the shade. During the winter, frost is never known; nor is it ever so cold as to require the use of fire. The eastern beach commands a beautiful view of the open sea, and offers, especially during low tide, an admirable place for exercise on horseback for the distance of four or five miles, and for morning and evening walks. The waters around abound in green turtle, and a variety of excellent fish, forming a wholesome and nutritious diet, particularly well suited to cases of pulmonary disease. There is also an abundance of crawfish and crabs. The mainland is only a short distance off, abounding with deer and a variety of other kinds of game, affording a fine field for the

*The cabbage-palm, [*chæmarops palmetto,*] is a beautiful tree, presenting sometimes a straight column of 80 feet without a limb. The trunk is generally enclosed by the foot-stalks of the old branches, resembling a coarse net-work. The embryo head is esculent, bearing the taste of unripe chesnuts. The leaf is used in the manufacture of hats, mats and baskets, as well as in the construction of the Indian's wigwam.

sport and exercise of hunting; and the vicinity of the West India islands will, at all times, present the opportunity of procuring the best of tropical fruits.

"The proprietor of the island will, in a short time, erect buildings, and will establish every means in his power for the convenience and comfort of those who may be disposed to visit the place for the recovery of their health. There has been not a single case of fever among the troops since I have been stationed here, and I have no hesitation in stating my opinion that it will be perfectly healthy at all seasons of the year."

When not exposed to the influence of malaria, the climate of Florida, as along the eastern coast, is, even in the season of summer, quite salubrious. The sea-breezes, aided by the deposition of moisture from the atmosphere, generally render the nights pleasant, even in the hottest months and in the centre of the Peninsula. The writer can state from personal knowledge, that after the middle of August the nights become so cool that a blanket is desirable. The climate of the tropics is characterized, as Humboldt justly remarks, much more by the duration of heat than its intensity; and it is to the action of this unceasing high temperature that much of the injurious influence of tropical climes on northern constitutions, is to be ascribed.

But woe to the invalid that braves the torments of a summer residence under the disadvantages of a camp life! Insects are the pest of a tropical clime. As to fleas, flies, and ticks, the interior of Florida may well rival Egypt in the days of Pharoah. The chigoes insinuate themselves beneath the skin, where they soon establish populous colonies. Flies seem, indeed, to form a component part of your food, your drink, and the atmosphere you inhale. Lizards, snakes, and scorpions, get into your bed, whilst the industrious ant and weevil not only eat your rations, but devour your books—the food of the mind. All nature seems alive; and every hour you observe some uncouth living thing, whose family name has scarce been registered by the entomologist. In addition to these annoyances, you will have a nightly serenade performed by wolves and alligators—a woful concert of whining yells and dismal bellowings, constituting the realization of a *howling* wilderness.

Since a more rational view of the nature and causes of pulmonary diseases has prevailed, the beneficial effects of change of climate in certain forms have been fully established. Formerly, when consumptive patients were indiscriminately con-

demned to endergo expatriation, the unfortunate invalid often sank before he reached his destination, or he was doomed soon to add another name to the long and melancholy list of his countrymen, who seem to have sought a foreign land, far from friends and home, only to find a premature grave. When it is considered, however, that all remedial agents have proved so inefficacious in phthisis pulmonalis as to place it emphatically among the *opprobria medicorum*, it is no ways surprising that its victims should seek beneath the influence of a more genial clime, the relief, however uncertain, denied them in their own.

The south-western coast of a country is generally mild and humid, and consequently soothing but rather relaxing. In diseases accompanied with an inflammatory condition of the general system, or dependent on an excited state of particular organs, this variety of climate has been found more especially beneficial. Decided advantage may reasonably be anticipated in chronic inflammatory affections of the trachea and bronchia, attended with a dry cough and little expectoration; but when such cases occur in individuals of a languid and relaxed state of constitution, accompanied by copious expectoration from the mucous surfaces, the disease is much more likely to be aggravated than relieved. These remarks, which are made by Clark "on Climate," are equally applicable to all other diseases attended with great relaxation of the general system. It is, therefore, manifest that, in recommending a change of residence to invalids, attention to these distinctions, both in regard to varieties of climate and peculiarities of disease, is absolutely necessary.

The climate of Florida has been found beneficial in incipient cases of pulmonary consumption, and th.. threatened with the disease from hereditary or acquired predisposition. It is in chronic bronchial affections more particularly that it speedily manifests its salutary tendency. To distinguish the *bronchial* from the *tubercular* form of the disease, often demands considerable powers of discrimination; and upon this distinction frequently hangs the propriety of a removal to a southern clime. The application of the physical means of exploration, now so ardently cultivated, has fortunately given a greater degree of certainty to our diagnosis.

But there are other forms of disease in which such a climate as that of East Florida is not unfrequently of decided advantage. To this class belongs *asthma*. As this term is too commonly applied to every disease in which difficulty of respiration is a prominent symptom, let us not prescribe for a mere

name; but when consulted on the propriety of a change of climate, let the pathological condition of the patient be duly estimated. In simple spasmodic asthma, unconnected with organic disease, or in that form which is complicated with chronic bronchitis, or is symptomatic of primary irritation in other viscera, such as the stomach, intestines or uterus, the patient is generally much benefited. In asthma connected with affections of the heart, a mild climate often affords temporary relief. In this variety of complication, a sea-voyage is frequently of striking service.

In chronic disorders of the *digestive* organs, when no inflammation exists or structural changes have supervened in viscera important to life, but the indication is merely to remove diseases of a functional character, a winter residence promises great benefit; but exercise in the open air, aided by a proper regimen, are indispensable adjuvants.

In many of those obscure affections, called *nervous*, unconnected with inflammation, exercise and travelling, in this climate, are frequently powerful and efficient remedies.

Chronic rheumatism, though apparently much less under the influence of meteorological causes than pulmonic affections, will often be benefitted by a winter residence in Florida. As these cases often resist the best directed efforts of medicine, it is the only remedy which the northern physician can recommend with a reasonable prospect of success. When the disease is complicated with much derangement of the digestive organs, it is customary in Europe to visit such places as combine the additional advantage of a course of bathing, as the mineral waters of the Pyrenees, those of Aix in Savoy, and the various baths of Italy.

When there exists a general delicacy of the constitution in childhood, often the sequel of rubeola or scarlatina, manifesting itself by symptoms indicative of a scrofulous disposition, a winter residence in a warm climate frequently produces the most salutary effects. At the period of puberty in females, a similar condition of the system often arises, preventing the development of those new functions peculiar to this stage of life. This general derangement, if not soon corrected, often results in a constitutional disorder beyond the resources of our art, denominated by Clark "*Tubercular Cachexy*," the precursor of pulmonary consumption. If the winter can be passed in a warm climate, and the patient have the advantage of exercise on horseback, warm sea-bathing, and a well regulated diet, the youthful invalid may often be rescued from an untimely grave.

Another form of disease remains to be alluded to, in which a change of climate promises its healing powers, *viz:* premature decay of the constitution, characterized by general evidence of deteriorated health, whilst some tissue or organ important to life commonly manifests symptoms of abnormal action. This remarkable change often occurs without any obvious cause, and is not inappropriately termed in common parlance, "a breaking up of the constitution."

Let not the invalid, however, trust too much to a change of climate. Unfortunately for the character of the remedy, it has been recommended indiscriminately and without proper consideration. It has been too often resorted to as a last resource or forlorn hope; or in cases susceptible of allevintion or permanent cure, it has been wholly misapplied. One person is hurried from his native land with the certainty of having his sufferings increased and his life shortened, instead of being allowed to die in peace in his own family; whilst another, who might derive much advantage from the change, is sent abroad wholly uninstructed in regard to the selection of a proper residence, or ignorant of the various circumstances by which alone the most suitable climate can be rendered beneficial. It is one of our most powerful remedial agents, and one too which, in many cases, will admit no substitute. But much permanent advantage will result neither from travelling nor change of climate, nor their combined influence, unless the invalid adheres strictly to such regimen as his case may require. This remedy must be considered in the light of all other therapeutic means, and to ensure its proper action, it is necessary that the requisite conditions be observed.

At the present time, St. Augustine and Key West are the only places, which afford the conveniences required by the wants of an invalid; but assuming that proper accommodations can be equally obtained at all points, Key Biscayne on the southeastern coast, or Tampa Bay on the Gulf of Mexico, claims a decided preference, especially over St. Augustine. As a general rule, it would be judicious for the northern physician to direct his pulmonary patient to embark about the middle of October for Tampa Bay. Braving the perils of the wide ocean, he will realize the healthful excitement incident to the fears and hopes of a sea-voyage. Having spent the winter months at Tampa, let him proceed early in March to St. Augustine, by way of Dade's battle-ground and the old Seminole agency. In addition to the corporal exercise, he will find food for mental digestion at every step of his journey. Having thus reaped the benefit of a sea-voyage and all

the advantages to be derived from a change of climate, the valetudinarian may return to his anxious friends so much renovated in health and spirits as to be capable of enjoying again the blessings of social life.

As long, however, as predatory Seminole bands retain possession of this peninsula, few itinerant invalids will imitate the example of the celebrated Spanish adventurer, Ponce de Leon, who, in the wild spirit of the 16th century, braved the perils of unknown seas and the dangers of Florida's wilds, in search of the far-famed fountain of rejuvenescence. When the period, however, of the red man's departure shall have passed, the climate of this "land of flowers" will, it may be safely predicted, acquire a celebrity as a winter residence not inferior to that of Italy, Madeira, or Southern France.

A paragraph of this extract it will be observed, relates to the influence of the climate of Florida on *rheumatics*. It is not improbable, that in many coses chronic rheumatism may be alleviated or cured by a sojourn in the south; but we must confess that the evidence in favour of this opinion, furnished by the work before us is not very strong. From a table which we shall not extract, the proportion of cases which have occurred at the posts of East Florida, is greater than the posts of New England, and scarcely less than an average of all the military stations in the union. It is, however, considerably less than the average of the garrisons near the lakes and on the upper Mississippi; though, again, it is greater than the posts of the south west and the lower Mississippi, especially the last, where the number is only about two thirds of the general average; from all which we are warranted in cautioning our brethren, against promising their patients with chronic rheumatism, the same benefits from a visit to East Florida, which they may predict for those who labour under chronic laryngitis and bronchitis.

In conclusion we must express our gratification at the care, ability and candour with which Dr. Forrey has discharged the duty assigned him; and express the hope that our army friends will persevere in the good work they have begun, until the medical statistics of the army shall assume

a scientific and settled character; and the results of their enquiries be made available, in practice, to the whole medical profession. D.

BIBLIOGRAPHICAL NOTICE.

A System of Practical Medicine, comprised in a series of original dissertations. Arranged and edited by Alexander Tweedie, M. D. F. R. S. &c. With notes and additions, by W. W. Gerhard, M. D. &c. Philadelphia. Lea & Blanchard. 1841.

We have just received a copy of this work, completed as it is in five volumes. We of course could not, in any reasonable limits, give even a very condensed view of the monographs of which it is made up; and, not having called their attention to the volumes as they came out, we would now earnestly recommend to our country brethren to supply themselves with this ready and valuable book of reference. The contents of the volumes are as follows:

Vol. 1. Dissertations on Fevers, General Pathology, Inflammation, and Diseases of the Skin. By Drs. Symonds, Allison, Christison, Schedel, Locock, Gregory, Burrows, and Shapter.

Vol. 2. Dissertations on Nervous Diseases. By Drs. Hope, Prichard, Bennett, Taylor, and Thompson.

Vol. 3. Dissertations on Diseases of the Organs of Respiration. By Drs. Williams, Carpenter, and Joy.

Vol. 4. Dissertations on Diseases of the Digestive, Urinary, and Uterine Organs. By Drs. Joy, Symonds, George Budd, Thompson, Christison, Ferguson, and Simpson.

Vol. 5. Dissertations on Hæmorrhages, Dropsy, Rheumatism, Gout, Scrofula, etc., etc., etc., with a Formulary and General Index. By Drs. Burrows, George Budd, Watson, Shapter, Rowland, William Budd, Farre, and Joy.

Selections from American and Foreign Journals.

Case of Polypus Uteri, removed by Excision: with practical remarks. By Chandler R. Gilman, M. D., Prof. of Obstetrics and the Diseases of Women and Children in the College of Physicians and Surgeons, New York.—Polypus Uteri is a rare disease, and although it is a well settled principle, that the tumor should be removed as soon as possible, yet the manner of removal is still matter of dispute. The older English writers, are nearly unanimous in favor of the ligature, but among the more modern, Simson of Edinburg, Churchill of Dublin, Sir B. Brodie and Mr. Arnott, favor excision, and I find it stated in a late number of the British and Foreign Review, that it is now preferred by the majority of English practitioners. On the continent, excision has decidedly the majority in its favor. Dupuytren revived and established the practice in France, and in Germany, Osaiander, Siebold and others have done the same; it is now everywhere preferred.

With all this weight of authority in its favor, I believe the operation has not been extensively adopted in America. I cannot find that it has ever been performed in New York. The fear of hæmorrhage, the authority of some of our most distinguished teachers, the habit of preferring the ligature, have each, probably, had their weight in producing this result. Believing that excision is, in the majority of cases, the better operation, I have thought that the report of a case in which it was practiced with the most entire success, might do good, by leading the junior members of the profession to examine the ground thoroughly before they resolve to "walk in the footsteps of their predecessors." Perhaps even some of the advanced may think proper to reconsider their opinions, and adopt an operation which, if it can be proved to be equally safe, is certainly in every other respect to be preferred.

May 29, 1841.—I was requested by Dr. M'Comb to see a German female, Mrs. M——, aged 33—married three or four months. Before seeing her, I received the following history of her case. Mrs. M. enjoyed very good health and was rather robust till about eight months ago, when the menses began to be very profuse, continuing for six or eight days, and very free during all that time. During the intervals, however, she had no sanguineous or other discharges. About two weeks after her marriage she was again profusely "*unwell*," and from that time to the present, the hæmorrhage has been constant, though at some times more profuse than at others. The general health is beginning to suffer seriously, the strength is gone, the appetite diminished, and the symptoms of anæmia are gradually being developed. Such was the brief history of the patient; her appearance verified it, the pallor is excessive, the pulse weak but easily excited, the breathing hurried, the muscular strength utterly prostrated. Ergot had been given a few hours before I saw her. The hæmorrhage was slight but she complained much of pain in the back, bearing-down efforts and frequent desire to make water. Bowels were moved freely by castor oil this morning, evacuations natural. *Examination per vaginum.*—The vagina is occupied at its upper part by a firm, dense tumor, about the size of a hen's egg: at first I supposed, from the woman's complaints, that it was very sensible to the touch; she screamed when I pressed it from side to side of the vagina. Passing the finger upward along the tumor, it was found to be attached to, or a continuation of, the anterior lip the os uteri: the finger could easily be passed half round the tumor behind, and then into the os. The anterior lip was firmer than natural, though scarce so firm as the tumor: the posterior lip was natural, and the soft, spongy, relaxed feel which it presented, and which exactly resembled that of the os during the menstrual flow, contrasted remarkably with the dense cartilaginous feel of the tumor, and the anterior lip. Was this a polypus? The symptoms rendered it probable, but the examination was not quite satisfactory. The tumor was not pedicelated, and it appeared to be sensible, at least pressure upon it gave pain. More careful examination cleared up the latter and the chief difficulty. I found by cautious trials, that tho' pressure upon the tumor gave pain, it was only when that pressure communicated motion to it; scratching, or even puncturing the tumor, (for I tried this by means of a pointed probe,) excited no sensation. This decided the diagnosis in favor of polypus, and the immediate removal of the tumor was readily

ed on. After a full consideration of all the particulars of the case, with the advantage of a consultation with Dr. Delafield, I resolved to remove it by excision. Upon the general merits of this operation and that by ligature, I shall remark by and by. The particular features of this case, which led me to prefer excision, were, the situation of the tumor, attached to the anterior lip of the os tincæ, and of course fully within reach; the density of its structure, rendering it probable that the process of decay would be slow and tedious; and the extreme heat of the weather, during which the constant presence for many days of a putrifying mass in the vagina, would be likely to induce serious symptoms. In addition to all these reasons, the fact that a certain number of cases of puerperal fever had appeared in New York during the last six or eight weeks, was not without its weight. It is well known that where peurperal fever has been epidemic, the operation of removing a polypus has been followed by a peritonitis, having all the characteristic symptoms of the puerperal epidemic. These considerations determined me to remove this tumor by the knife, which I accordingly did, in the presence and by the kind assistance of my colleague, Professor Parker.

The bladder and rectum having been well evacuated, Weiss' speculum vaginæ was introduced, and upon expanding the blades the tumor was brought fairly into view. The color was bright red, and it contrasted in this respect very strikingly with the vagina, which was singularly pale. I grasped the tumor with a pair of hooked forceps and tried to drag it down. I found, however, that here the speculum presented an obstacle, for as I pulled down, the ends of that instrument pushed up, or at least supported the parts. The speculum, too, hindered the free use of the fingers in the vagina; it was therefore withdrawn, and then the tumor was drawn down till the neck, or rather its junction with the anterior lip—for the tumor was not pediculated—was fairly within the reach of the finger. Cooper's bistoury, with blunt point and a small portion of cutting edge, was now introduced flat upon the fore-finger, and when the point had fairly passed the base of the tumor, a few strokes sufficed to divide it. On withdrawing the polypus in the grasp of the forceps, I was prepared for some hæmorrhage, and placed a napkin over the vulva; to my surprise, on looking at it after the lapse of several minutes, it was not even tinged. Before I left the room there was a very slight stain, but nothing worthy of the name of hæmorrhage occurred then or since. The discharge ceasing with the removal of the tumor, the recovery was un-

interrupted and satisfactory. On examining the tumor, it was found to consist of dense white fibrous matter, presenting upon its very surface some traces of vascularity, but within entirely devoid of anything of the kind.

Remarks.—There are two or three points about this case to which I wish to direct the reader's attention. 1st. The fact that though the tumor was insensible, yet when pressure communicated motion to it, great pain was complained of. The pain in this case was doubtless caused by the forcible dilatation of the cervix when the tumor was moved. May not something of this sort have given rise to the opinion that tho' polypi are very generally not sensible, yet in some rare cases they are acutely so? I throw out the idea merely as a suggestion. As an aid to diagnosis, puncturing the tumor with a pointed probe, or scratching it with the sharp finger nail, should be remembered. 2nd. The bright florid red of the tumor, when the vaginal mucous membrane was remarkably pallid. This certainly depended on the lining membrane of the tumor. What is that lining membrane, and has it any connexion with the profuse hæmorrhages by which these cases of polypi are distinguished? The source of these hæmorrhages has long been a disputed point, and is yet involved in the most profound obscurity. Gooch, believes, that the flow is from the lining membrane of the tumor. Hamilton contends, that to support the growth of the tumor, a sanguineous flux takes place to the uterus. Levret refers it to the distension of the uterus, the enlargement and opening of its venous sinuses. "Hence,"—says he—and the remark is quoted with approval by Boivin and Duges—"polypi of the cervix seldom cause hæmorrhage." In this conflict of opinion, I confess I incline to that of Gooch, and I am somewhat strengthened in my opinion, by the appearance of great vascularity by which the surface of this polypus was distinguished, as well from the cervix uteri as from the vagina. At any rate, the fact of vascularity is worth noting. 3rd. As to the operation, the directions in the books are, to grasp the tumor, draw it down till the stalk pass out of the vagina, then with a bistoury or scissors cut it off close to the vulva. This, as I happen to know, was the practice of Lisfranc. Now to this dragging down I object, as inflicting both unnecessary pain and additional danger on the patient, and being quite unnecessary. That it gives very great pain will readily be believed, but it is not equally certain that it is attended with danger? When we thus pull the uterus down, upon what does the strain fall? certainly upon the reflexions of peritoneum, forming the broad,

the utero-sacral, and the utero-vesical ligaments. Now, this peritoneum is slightly, if at all, extensible, and therefore can only give way by being detached at some point or points. Is not this violence offered to the peritoneum exactly the means most likely to produce the thing we have chiefly to fear after this operation, I mean peritonitis? But is this dragging the polypus out of the vulva, necessary? I think not. If the pedicle is fairly within the reach of the fingers at the point where we wish to divide it, and we use a bistoury with blunt point and little cutting edge, especially if the blade have some lateral curvature, the operation can be performed without much difficulty; and, supposing the operator to possess a reasonable share of caution and dexterity, without the slightest danger of wounding either the cervix or the vagina. I had intended to offer some observations on the comparative merits of excision and ligature, but my paper has already extended to sufficient length, and I must defer them.—*N. Y. Med. Gaz.*

Excision of the Uvula and Tonsil, for the cure of Stammering.—A Mr. Poett has been investigating the merits of Mr. Yearsley's operation, which, like a great many other novel remedies, will not bear a close inspection. A Mr. Butler, one of the earliest cases he operated on, and a very formidable one, had, as soon as his throat healed, a return of his disease. Two boys, reported to have stuttered and been cured, proved on inquiry, the one never to have done so, the other to be as bad as ever. Case number five was no better, and two could not be found at the address given in the work. Several others owned that at first they felt some relief, but when excited, or agitated, stuttered as badly as before. When once the influence of the operation on the nervous system has subsided, the infirmity will probably re-appear, and though the simple and easy operation may be tried with a faint prospect of benefit, no reliance can be placed on it, and it will probably share the fate of all over-rated novelties, and fall into deserved oblivion. Mr. Yearsley has greatly deceived himself or others. This operation is not "what it was cracked up to be." Shall we be permitted, descending from "grave to gay," to append a little anecdote as somewhat "germane to the matter," and *the times?* A gentleman who stuttered badly, put himself under the care of a celebrated curer of the infirmity, and derived, as

he thought, much benefit from his advice. Meeting one day, a friend who stuttered as badly as he had done, he very kindly said to him, "W-w-w-why, m m-m-my d-d-dear S-s-sir, d-d-d-d-don't you g-g-g-go to the m-m-m-man that cu-cu-cu-cured me?" Mr. Poett's paper is in the Lancet for June 12, 1841.

A Reviewer, in the last number of the British and Foreign, states that he too has taken pains to look up some of Mr. Yearsley's *cured* cases, and from personal examination he condemns, as every man of sense and honor must, this absurd operation.—*N. Y. Med. Gaz.*

Case of Calculous Concretion forming around a fragment of a Bougie of the Slippery Elm. By Willard Parker, M. D., Professor of Surgery and Surgical Anatomy in the College of Physicians and Surgeons of the University of the State of New York.

April, 1839. I was called to visit a patient at New Richmond, and requested to come prepared for the operation of lithotomy. The patient I found to be a man of naturally good constitution, a carpenter, married, and twenty-eight years old.

Upon inquiring into the history of the case it appeared, that three years before he had had some uneasiness in the urethra and difficulty in passing his urine. He applied to his family physician and soon obtained relief, and remained quite well until January, three months previous to my visit to him. He was then "down the river," and much exposed to wet and cold, after which his former difficulty in the urethra made its appearance again. He was advised to employ the slippery elm bougie, and proceeded at once to prepare one from the inner bark of the elm, fifteen inches long, and after immersing it in warm water for a few minutes, he succeeded in introducing it as directed, into the urethra; but when he attempted to withdraw the instrument it severed, and four inches were left behind. This almost immediately passed into the bladder.

Cystitis ensued at once, and the patient suffered intensely for a long time: at length, the severity of the symptoms abating, he was enabled to reach his residence. I found him greatly emaciated, pulse over one hundred, discharging from the bladder, as was judged by his attending physician, Dr.

Johnson, six or eight ounces of pus and mucus per diem. He had considerable suffering still about the neck of the bladder and along the urethra, and was unable to move without great distress. He had irritation at the rectum, tesnesmus, and some prolapsus.

There was no difficulty in the introduction of the sound: at the inferior fundus of the vesica urinaria was situated a large mass, immoveable, and having a gritty, yielding feel, as the sound was pressed upon it. On introducing the finger into the rectum, the foreign body could be distinctly felt, and it seemed impossible to remove it from its position.

It was decided that the mass must be removed, and for that purpose, the ordinary single lateral operation for stone was performed. After the incision into the bladder was made, and the forceps introduced, the bark could not be reached by them so as to be removed from its bed. The scoop was next employed, and by the aid of this instrument and the finger, the mass was loosened from its confinement and withdrawn, the bladder washed out with care, and the patient removed from the table to the bed.

Following the operation, there was considerable constitutional excitement for a few days, after the subsidence of which his health became better, the wound healed kindly, the discharge from the bladder soon ceased.

The points of interest in the above case, are, first, the nature of the nucleus, which was throughout encrusted with phosphatic deposit; and second, the fixedness of the mass at the bas-fond of the bladder. It is very probable that had the foreign substance been allowed to remain, ulceration would have taken place into the rectum, forming a recto-visical fistula and from the irritation induced in the general system the patient would have succumbed.

The elm, it ought to be remarked, is a valuable article in surgery, as a tent to dilate fistulous openings, and were it not for its fragility it might be employed as a bougie for dilating strictures of the urethra. When the stricture is located just behind the glans penis, it may then be employed with safety. The elm, when used to dilate, must have been dried, and when shaped, then plunged into warm water for a few minutes, until its exterior becomes lubricated by the mucilage, and then it is introduced with much ease, and soon swells very much, and overcomes the constriction.—*N. Y. Med. Gaz.*

On the value of Albumen in the Urine, as indicative of Renal Disease.—By W. C. Roberts, M. D., of New York. It has been, and still is by many supposed, that the presence of albumen in the urine is always a sure sign of the existence of renal disease. Upon this subject much misconception exists, and it is important to set the matter in its proper light.

It is incorrect to hold, as some do, that albuminous urine is pathognomonic. or, by itself characteristic, of granular degeneration of the kidney, or Bright's disease. A variety of other causes, as a blister, certain indigestible articles of food, as pastry, cheese, &c., hæmaturia, the existence of pregnancy, the action of mercury, and a variety of local irritating causes, will render the urine albuminous.

In reference to this matter, Dr. Bright, the distinguished discoverer of the disease which bears his name, observes: "I am anxious to explain my view, on an important point, connected with the disease attending albuminous urine, in reference to which I have been singularly misunderstood, and as a necessary consequence, misrepresented, by many who have written and lectured on this interesting subject. The misconception to which I refer is, that I maintain the occurrence of albuminous urine to be always, and necessarily, connected with that organic disease, which, in its various shapes and modifications, has been so fully described. Now the truth is, that I have never written upon the subject, *without studiously stating the contrary*, and declaring, that I considered the disease, in its commencement, *entirely functional*. In my second volume, I thought it right to say: 'from the observations of some of my professional brethren, I am led to suppose they consider me as asserting, that this description of urine exists *only* when organic disease has already taken place in the kidney. This, however, is by no means the view which I have taken of the subject. I believe functional disease in this, as in most other cases, precedes the structural change for even many weeks and months, and that the kidnies of a patient who has been cut off early by some other disease, may afford very little evidence of diseased structure'"

Dr. Graves, of Dublin, and Dr. Elliotson, of London, have been the most distinguished among the opponents of the idea improperly, as it thus appears, ascribed to Dr. Bright, of the universality of the connexion between albuminous urine and diseased kidney. The former states distinctly that he cannot admit that the albuminous state of the urine in dropsy, depends upon an alteration in the texture of the kidney; hav-

ing so often seen cases in which the albumen disappeared under suitable treatment, that it must depend upon functional disorder. The reader will find some remarks by him on this subject, in the Dublin Journal; and in the American Journal of the Medical Sciences, for Feb., 1839, he will find a clinical lecture of his, in which he details the case of a man who had dropsy with albuminous urine, who recovered—his urine becoming healthy, and so continuing for a fortnight. At the end of this time he got erysipelas of the head and face, and his urine became albuminous again. He died, and on examination, his kidneys were found large, pale, rather soft, but not granular. From this case he draws the conclusion, that the general state of the constitution influences the appearance of albumen in the urine, more than any change in the structure of the kidney. He cites another case by Morison, where a man passed albuminous urine for five years, and whose kidneys, except that they were blanched, were natural. He then mentions a case, where a boy, after scarlatina, passed highly albuminous urine, whose kidneys were found healthy after death: and he says that Forget has recorded many others. He further adds, that the albuminous state of the urine appears to him to be the *cause* of Bright's disease. And he conceives that a deposition of albuminous molecules, separated by coagulation, remain in the secreting tubes of the kidneys, which they gradually fill and distend, and thus give rise to an obliteration of the tissue, which is called '*Morbus Brightii.*' The kidneys are thus not the cause of the secretion, but themselves the receptacles of it.

This ingenious theory is founded on a microscopical examination, made by Valentine. It is, however, only a single case of one form of the disease, and is controverted by subsequent examinations of Gluge's.

Dr. Elliotson remarks, that because the urine is albuminous, it cannot, he thinks, be inferred, that the kidney is in a state of organic disease; "for," says he, "I have seen so many dropsical persons, who had albuminous urine, restored to perfect health, that I could not suppose the kidney to have been organically diseased. Nor can I admit," he continues, "that there existed in these cases, inflammation or congestion of the kidneys, because I did not observe the signs of those affections." Lastly, he has, he says, seen the urine albuminous when there existed no reason to suspect a disease of the kidney, and although, in a state of disease or congestion of the kidney, the urine may be generally albuminous, he should not, because it was so, conclude the kidney diseased.

Not to cite any of those cases particularly, in which it is said that albuminous urine has been met with accompanied by renal disease, it may be stated, in a general way, that some are of dubious authenticity, or import, being scarcely free from the suspicion that they were, in some measure, connected with the morbid action which gives rise to granular deposition; and the whole taken together, will merely show, that beside granular degeneration, *some other diseases may, in a few, comparatively very rare instances, be accompanied with the discharge of albumen in the urine*, the affection being then, as admitted by Bright, functional only. The knowledge of this fact is certainly useful in guarding us against that unreservedly discouraging opinion, which without it we might feel always disposed to give, both as to the probable supervention of dropsy, when it had not yet occurred, and the almost certainly fatal result when it had. But, unquestionably, there is no other cause, or rather, there are no other causes taken together, by which an albuminous impregnation is so often induced, as by the disorder in question; and it may, in the present state of our knowledge, be stated as a general proposition, that the excessive loading of the urine with albumen is characteristic of granular degeneration of the kidney. In no case of this disease hitherto noticed, has the urine failed, at some time or other, to be albuminous.

Besides the diseases which have been already noticed, albumen is found in the urine as a consequence of certain organic diseases of the kidney also; these are pyelitis, chronic and acute nephritis, encysted states of the kidney, cancer, tubercle, cerebriform cancer, strumous degeneration, and diabetes.

The three following propositions embody the sum of our knowledge, with respect to the albuminous urine as a symptom of renal disease. 1st. Whenever its exists in the urine, there exists in all probability, a lesion of the genito-urinary apparatus. 2d. That the existence of such urine, of a diminished specific gravity, in a person presenting, as yet, no other symptoms of disease, is sufficient to indicate the existence of renal affection, and to prognosticate the supervention of dropsy if the affection proceeds. The exceptions to this general rule are, that the renal affection may be functional only, or be some other of the morbid states of the kidney, in process of development. 3rdly. That if a pale and turbid urine be passed, for the most part, depositing no sediment, giving by appropriate test an abundant albuminous coagulum, containing or not other elements of the blood, having a specific gravity below the normal standard, with a co-existing diminution of

the urea, uric acid, urates and phosphates, and there be *general anasarca*, with or without fever, or pain in the loins, there exist some of the anatomical characters which constitute albuminous nephritis. (*Rayer, Christison.*)—*N. Y. Med. Gazette.*

On Dilatation by Fluid Pressure in Stricture of the Urethra. By James Arnott, M. D.—Although our knowledge of the pathology of stricture of the urethra has been much extended by the labors of Hunter and others, the treatment of this very common and distressing disease differs at the present day in no very material circumstance from that which was followed two hundred years ago. In the works of Wiseman, published in the reign of Charles the II., the various practices now had recourse to will be found described. He mentions the use both of metallic and soft bougies; the application of caustic is noticed, a practice which was revived by Hunter; and cases are related in which the operation of opening the urethra behind the stricture was performed, instead of puncturing the bladder—an expedient of which the late eminent Sir Astley Cooper has been deemed the original proposer.

Unfortunately, this stationary condition, during the progress of almost every other department of surgery, has not preceeded from the treatment of stricture having attained perfection. On the contrary, it is acknowledged to be an opprobrium of the art. The means employed are admitted, by conscientious and intelligent surgeons, to be, in almost every case, but palliative; and although stricture may generally be much relieved by such means applied from time to time, it cannot be denied that the irritation which accompanies organic changes in a part of so much sensibility as the urethra, will, by long continuance, often produce other disease in the neighboring organs of the urinary and generative systems, which is sure to embitter, if it does not shorten, the life of the sufferer.

It is now many years since I introduced to the profession an account of practices in the treatment of stricture which I had had sufficient experience to recommend as substitutes for the very imperfect and sometimes hazardous measures in common use. But because the apparatus recommended was of

rather a complicated description, as compared with that usually employed, and because part of it was constructed on mechanical principles, with which surgeons generally were not familiar, it has either not been used at all in this country, (where the French modifications of plans of treatment I had proposed in impervious stricture, and of a new method of applying caustic, are almost unknown,) or in so imperfect and erroneous a manner, as to disappoint expectation.

The purpose of this paper is to describe a modification, which I have lately contrived, of the instrument employed in the dilatation of stricture, combining the essential requisites, for general use, of simplicity of construction and easiness of application; and I cannot doubt, from its great and manifest superiority over the means commonly had recourse to, in the degree of relief afforded by it, and the safety and quickness with which this is obtained, that it only requires to be known to be immediately adopted.

Dilatation of stricture has been effected in two ways: by instruments which operate on the principle of the wedge, opening the constricted part as they advance in the canal, of which description are bougies and sounds; and by instruments which are themselves capable of distension, and which, by being made to enlarge in diameter whilst within the stricture, exert their dilating force from the centre directly outwards, or, as it may be termed eccentrically. Amongst the principal advantages of eccentric dilatation over that of the wedge, when effected by a proper apparatus, are—that instruments so operating, having no tendency to stretch or tear the urethra in front of the stricture, by pushing on the stricture after having passed partially through it, the surgeon is enabled by their means to use greater force (if required) with safety, than with rigid bougies and sounds, which have this tendency; that there is no danger, from the opposition to the passage of the instrument being erroneously attributed to the stricture instead of the wrong direction of its point, of the surgeon's piercing the side of the canal, and causing effusion of urine, or false passage; that the dilatation being effected without irritation from friction, and following the yielding structure, may be rapidly made; that the whole of a long stricture may be dilated at once, or several strictures are acted upon at the same time, instead of the action being nearly confined, as in the case of the bougie, to the front or face of the first stricture; and that, from the power of enlarging the instrument in the interior of the canal to any size, the dilatation of the diseased part may be carried to any greater extent

than the diameter of the outer orifice of the urethra, so as to afford the best means of effecting a permanent cure.

The apparatus used for dilatation, on the principle just explained, consists essentially of a strong membranous tube of fixed dimensions, which is placed, in its empty or collapsed state, within the stricture, and then injected with fluid. I have used such a fluid dilator, with various modifications, according to peculiarities of cases. The form of instrument most easily constructed and applied, and which has not as yet been described, is merely a varnished silk tube of the required diameter, and of a length to extend from the orifice to a little beyond the stricture, closed at one end, and having a small metalic connecting piece at the other, into which the injecting syringe may be screwed. This tube, by means of a slight coating of waxy composition, is, for the purpose of passing easily, rolled into the form of a common plaster bougie; and when it is not required to be of very small diameter in its collapsed state, the requisite stiffness may be given to it by rolling it upon a small catgut or stilet. A woven silk tube properly varnished would be perfectly water-tight; but this is of less importance, as a thick mucilaginous liquid will not escape but very slowly from a very imperfect tube made by sewing together the edges of a riband. This instrument, which may be described as a dilatable bougie, is as durable, and may be made at as little expense, as any instrument used in the treatment of stricture.

In keeping up distension, by means of a dilator rendered impervious to fluid by gut or caoutchouc, instead of the stop-cock recommended in former instructions on the subject, a contrivance may be employed for fixing the pistion of the syringe, when the required degree of pressure has been made, as by a cord passing through the ring at the end of the piston rod, or by a screw. When the piston is depressed by a screw (which may constitute the piston rod) the patient can himself increase or moderate the pressure with the greatest facility. If the distensible tube be made of strong silk, it may be thus gradually distended until it becomes as hard as a cylinder of wood. A connecting flexible tube of silk and caoutchouc between the metallic part of the dilator and syringe, prevents any jerking motion of the instrument in the act of screwing on the syringe, and is a convenient index of the degree of pressure applied.

In other applications of the fluid dilator, as in the cure of stricture of the rectum, and in the operation of slowly dilating the male or female urethra for the extraction of calculi, a long

connecting tube of this description, bringing the screw which regulates the pressure conveniently to the hand of the patient, would render the apparatus very complete. I have shown in the appendix to the late edition of my work on Stricture and Stone, that the advantage of *slow* dilatation of the male urethra must have frequently occurred to the operators by the Marian method, who professed to follow nature in their proceedings, as it has occurred independently to several surgeons of late years; but that the want of any instrument which could fulfil the indication must have prevented the success of any attempt of the kind. The equable, elastic, and controllable nature of fluid pressure, makes a dilator, judiciously constructed on this principle, incomparably superior to any other means that has been employed for the purpose; and furnishes us with a method of extracting urinary calculi, which, if I am not much deceived, will soon supercede the present painful and dangerous operations.

When stricture is to be dilated beyond the diameter of the orifice of the urethra, it is necessary to modify the instrument which has been mentioned above. The distension may be confined to the diseased part by placing a wide silk tube within another shorter tube of smaller diameter, or by passing it through a wide silver or elastic tube previously inserted as far as the stricture. In cases of very narrow stricture, only admitting instruments of the smallest size, a dilator may be passed through such a conducting tube, consisting either of a single or double piece of narrow gut dried in a compressed form, or of a silk tube rolled upon itself, and rendered sufficiently rigid by means of thick mucilage. It is unnecessary in these cases to have a distensible tube of the whole length of the conductor; a small bit tied upon the end of a long flexible tin tube, connecting it with the syringe, is sufficient.

In mentioning this mode of conveying a small instrument to narrow strictures by means of a conducting tube, I am led to notice a controversy which has been continued through several late numbers of the Medical Gazette, respecting the invention of what has been termed "the compound catheter." Dr. Buchanan, who claims the originality of this proposal, does not appear to be conversant with the modern French writers on urinary diseases, or he would have found that the plan of conducting small instruments through others of larger size is noticed in most of the works on that subject which have appeared in France during the last twenty years. But it is contended that Dr. Buchanan's instrument is more than a mere modification of former suggestions; that the principle

of it extends further: the smaller instrument, it is said, is not only conducted, but a way is prepared for it through the stricture by a dilatation effected by the pressure of the ends of the outer canulæ. Had a reference been made to the work from which M. Ducamp borrowed so liberally, instead of the treatise of M. Gerdy, who in this matter professes merely to follow Ducamp, it would have been discovered that there is no greater novelty in this idea of previous dilatation, than in that of conducting. In my Treatise on Stricture of the Urethra, (p. 133, 2d edition,) the following is mentioned amongst other means to be resorted to in cases of difficulty;—"The plan which I have recommended above, of passing a large canula (which in this case has a rounded end) enclosing an instrument down to the stricture, is very applicable here; pushing the canula against the stricture opens it, while the small bougie or catheter within is ready to be passed through."—*Lon. Med. Gaz.*

A Case of Ovarian Dropsy. By J. B. Kissam.—Mrs. D., aged 35 years, is the mother of ten children, had enjoyed good health till Feb. 1840, when she discovered an enlargement in the right side of the abdomen, and œdema of the lower limbs; in two months after she ceased to menstruate. Fluctuation being perceptible in the tumor, the use of calomel, squills, and digitalis was determined on. Under this treatment there was a decided diminution of size, and a single return of the monthly secretion. In September, however, the abdominal swelling again showed itself, with extensive anasarca of the lower half of the body, and of the abdomen, so great as to make the fluctuation very obscure. Her general health remained unimpaired, and she only complained of the great weight, difficulty of respiration, and an inability to lie down. The remedies before tried, were again resorted to, without benefit, and the increase of the fluid was so rapid, that paracentesis became necessary early in January last. The puncture was made at the usual point, midway between the umbilicus and pubis. The depth of the adipose and infiltrated cellular tissues was so great (nearly three inches) that after making the external incision with a scalpel, a large trocar was passed entirely to the guard of the canula, and the latter firmly pressed inwards before the fluid could be made to flow. Instead of

passing with the usual facility into the sack, the instrument seemed to meet with the resistance of a firm body, which was probably one of the tumors so commonly connected with the cyst in this disease. The fluid oozed so slowly from the wound, that the canula was withdrawn, and the incision left open, that the discharge might thus take place. On the following day it was ascertained that in the course of four hours, there had been evacuated forty-eight pints of a fluid, which soon firmly coagulated, and had precisely the appearance of blood; however, upon compressing a handful of it, it left no sanguineous stain; neither did the pulse give evidence of the system having sustained a loss of the vital fluid.

The abdomen, though somewhat softened, was not apparently much lessened in size. It was evident that the fluid was not entirely discharged; some relief was derived from the operation, and she was able to lie down for five or six weeks, after which a rapid accumulation took place. Medical treatment was resorted to, but without effect, and in the latter part of June it became necessary to repeat the operation. At this time, the anasarcous swelling of the abdomen and lower limbs was enormous, and fluctuation was discoverable only above the umbilicus. The patient could scarcely rise from her chair without assistance, and suffered much from dyspnœa; the measurement around the largest part of the body was *six feet and nine inches.* Owing to circumstances, my friend Dr. Hoffman advised me to make the incision and puncture *above* the umbilicus; from which a free discharge of transparent fluid was obtained, which soon coagulated. The inconvenience met with in the former operation from the depth of the infiltrated cellular tissue was at this time obviated by a suggestion from Prof. Gilman, viz: that the anasarca should be lessened around the point to be punctured, by pressing and kneading the part with the fingers for some minutes. After the perfect evacuation of the sac, the quantity drawn off proved by measurement to be *seventy-nine pints.*

The wound healed kindly, without any unpleasant symptoms. A new mode of treatment was now resorted to. She was put on the steady use of hydrarg., prot. iod., p. scillæ., and p. digital., which, after five weeks slightly affected the gums and acted very freely upon the kidneys. Three months have now elapsed, the patient's general health is very good, the anasarca has entirelp disappeared, and she has once menstruated; being the second time in the period of eighteen months. From a recent examination by several medical friends, it is evident there is no return of the disease, both

iliac regions being in a natural condition, and the abdomen perfectly flaccid.

From the previous speedy return of the disease, and the period which has elapsed since the operation, I am led to hope that its re-appearance need not be looked for; and that this may prove one of the few cases which yield to medical and surgical treatment combined.

Remarks.—The sanguineous appearance of the fluid first evacuated was new to me and to those who saw it. The resemblance of the fluid to blood was so exact that most of those who saw it, did not hesitate to pronounce it blood. Whence was this color? probably from a small quantity of blood being mingled with the fluid, the blood having flowed from some artery wounded in the operation. The trocar, as I have mentioned, seemed after having penetrated the abdominal wall to pass for some distance through a firm, dense structure. This was probably one of those tumors by which the walls of ovarian cysts are very frequently occupied—in it the blood vessel which supplied the blood, probably existed, and it was the dense fibrous structure of this tumor which prevent the free flow of the fluid on the first operation. That the bloody hue of the fluid was accidental, is proved by the fact that altho' the fluid was not entirely evacuated on the first operation, yet at the second it was found quite clear, though coagulable as before.

By the Editor of the Medical Gazette.—We record this case with peculiar satisfaction, because it was successfully treated by a remedy which, if not new, has been but little used. Mercury has, we all know, been frequently tried, but the weight of authority is against it. Iodine too has had its advocates, but we have few proofs, in the shape of well authenticated cases, of its curative powers. It would seem from Dr. Kissam's case, that more may be expected from the two remedies combined in the shape of iodide of mercury than from either singly. We recommend the remedy to the notice of our readers: let it be freely and fairly tried. That the trials should be fair, they will bear in mind that no treatment can be expected to avail, where the dropsical accumulation is the consequence of schirrus of the organ. This state (schirrus) cannot perhaps be certainly diagnosticated, but it should be suspected where the constitution is much broken, where there is evidence of cancerous cachexy, or where schirrus exists or has existed in any other organ. Again, to give this remedy a fair trial, the fluid should be fully evacuated first, and then,

the belly being well supported by tight bandages, let the diuretic be given till the gums are touched. The beneficial effect of tight bandaging is strongly, though not too strongly, insisted on by Hamilton; it should never be neglected. We may not dismiss this case of successfully treated ovarian dropsy, without a reference to the various surgical operations, those detestable "*feats of surgical daring*," which have been proposed and tried for the cure of the disease, and which have all been defended by assuming that the disease for which they were proposed was utterly incurable. We have in some editorial hints, on surgical ethics, already expressed our opinion of the propriety of this notion, that a surgeon is justified in trying any and every operation on a patient where she happens to have a disease which he thinks incurable, that is which *he does not know how to cure.* This, as we have said, is no reason at all for operating: the propriety of that step is to be settled by other and far different considerations. But how will the gentlemen who have been in the habit of very formally and, as they fancy, very scientifically, *putting their patients with ovarian disease to death*, whether by excision or by the introduction of tents, trocars or the like, feel, when they find that this so called incurable disease, has yielded to medical treatment after two tappings, one of them, as we believe, the largest on record (seventy-nine pints.) Surely one such case (we do not mean to say it is the only one on record,) should put these barbarous operations out of the mind of every man who means to be anything but a mere barber surgeon. We have no doubt if it had been Mrs. D.'s fate to fall into the hand of one of these gentry, she would now have been "sleeping in a bloody grave," and the records of science would have been disgraced, and the heart of every man of common humanity sickened, by the detail of another "*feat of surgical daring;*" perhaps we should have had the bloody history in all its fearful and disgusting details trumpeted forth in the penny papers, that all the world might know how recklessly Dr. —— could cut and carve the human frame. And then, the butcher would have called himself, and others would have called him, a surgeon. Thank God, such was not the fate of Mrs. D., and as a consequence, she lives, the centre round which the fond affections of a social circle cluster, and the barber surgeons have one the less murder to answer for. We congratulate Dr. Kissam, with our whole heart, on the result of his *case.—N. Y. Med. Gaz.*

New Treatment of Hydrocele. By M. Jobert.—This mode of treatment, which is founded on the same principles as that proposed by M. Velpeau for the cure of inguinal hernia, has already been put in practice by M. Jobert in several cases, and with every appearance of success. The following are the steps of the operation, as described in the report of the first case in which M. Jobert had followed the practice.

A small and very narrow bistoury was introduced at the middle and anterior part of the tumour, its cutting edge being directed inwards, and its back outwards. When the tunica vaginalis was pierced, M. Jobert depressed the handle of the bistoury, and carried it on in a direction parallel with the cord. Having reached with its point the summit of the tumour, he turned the cutting edge forwards as if to incise the integuments. This done, he withdrew the bistoury, dividing with its point the tunica vaginalis from the upper end of the sac to the point where the skin had been punctured. The bistoury was again immediately introduced by the same puncture, and the inferior part of the tunica vaginalis incised in the same manner. The fluid was then evacuated by the small puncture and compresses soaked in a solution of muriate of ammonia were applied. The patient suffered little during the operation, and nothing afterwards.

The day after the operation a small longitudinal depression was felt through the scrotum; corresponding with the point where the tunica vaginalis had been divided.

The operation was performed on the 22d of June, 1840, and the patient left the hospital about the middle of July, to all appearance cured.

In a case on which M. Jobert has since operated, in addition to the longitudinal incision he made likewise a transverse one, with the view of giving greater certainty of success.—*Edinburgh Monthly Journal of Medical Science.*

Dislocation of the Thumb.—At the last meeting of the Hunterian Society on the 9th of June, Mr. Adams directed the attention of the members to a novel proceeding which he had successfully employed at the London Hospital in the reduction of a dislocation backwards of the first phalanx of the thumb. In this case much extension in the ordinary manner had been

employed, but without relief. The method consisted in drawing backwards, or extending, as far as possible, the thumb, so as to incline the back of the first and second phalanx on the back of the metacarpal bone; by this the proximal end of the first bone was more closely approximated to the distal end of the metacarpal bone. The thumb was then gradually brought forwards over the end of the metacarpal bone, at the same time that the end of the first phalanx was firmly held in its position. By this means the thumb itself becomes converted into a considerable lever, the fulcrum of which is the proximal end of the first phalanx: the reduction was accomplished with great ease.—*Ibid.*

Tetanus, cured by section of the nerve supplying the part. M. Pecchioli has reported, in the Bulletin of Medical Science of Milan, two cases in which he cured tetanus by section of the nerve supplying the part. M. P. says that he had before proposed this operation to a patient, who, however, was unwilling to submit to it and died of the disease. Soon after he met with a well marked case in a young peasant, aged 17. The tetanus was caused by a lacerated wound of the great toe, penetrating the metatarso-phalangean joint; it had continued twenty-four hours. I made, says M. P., an incision eight lines in length, at the point where the saphena passes over the first cuneiform, after having sent a twig to the back of the foot: then I plunged the instrument quite to the bone, to secure the complete division of the nerve. The pain in the leg and foot ceased immediately, and soon after the spasmodic contractions disappeared to return to more. The other case is similar. The editor of the Parisian Medical Gazette commends this operation, and suggests that the section of the nerve could best be made beneath the skin, as in tenotomy. The operation would in that way be a very trifling one, and might be tried in all cases. We shall do so in the first case that offers. *N. Y. Med. Gaz.*

THE WESTERN JOURNAL.

Vol. IV.—No. IV.

LOUISVILLE, OCTOBER 1, 1841.

ENDEMIC DYSENTERY.

It seems that, in particular localities of the West, this disease has prevailed during the past summer, while large intervening districts have been nearly exempt. In the former it has often been fatal, especially to children. We hope our brethren where it prevailed, will favor us with histories of it for publication, which shall embrace an account of any thing in the condition of the earth, air, and water, which is not present every summer; together with notices of its pathological phenomena, and the treatment found by them to be most efficacious.

D.

BOARD OF HEALTH OF NEW ORLEANS.

The whole of the Mississippi Valley is interested in the sanatory regulations of New Orleans, as every neighborhood has its representatives in that city, from the end of autumn till the beginning of sum-

mer. It is remarkable, that till July last, the city of strangers should not have had an organized Board of Health. We are indebted to a friend for a series of newspapers, in which the arrangement for establishing such a Board, and some of its first proceedings are published. It appears from one of them, that to Dr. E. H. Barton, late a professor in the Medical College of Louisiana, the city is chiefly indebted for this important institution—of which, appropriately, he has been made the president. The ordinance establishing the Board was passed on the 9th of June. From the 12th of May to the 1st of December it is required to publish weekly statements of the number of deaths, with the age, sex, color, vocation, nativity, &c. of each individual; and from the 1st of December to the end of April, monthly reports of the same kind. When there is an epidemic disease, daily reports are to be made. We have before us some specimens of these reports, and think they promise to put us in possession of valuable information, on the statistics of disease in our great southern metropolis. In the opinion of the General Council of New Orleans, that city, with the exception of its summer and autumnal fevers, is as healthy, or even healthier than any other city in the Union; a conclusion which we are not disposed to controvert; but the new regulations, in a few years, will afford data for a correct decision. We congratulate Professor Barton on the successful result of his labors, and hope he will persevere. D.

STATE MEDICAL SOCIETY OF KENTUCKY.

We take the liberty of calling the attention of our readers in this state, to the first annual meeting of this society in January next. Let it not only be well attended, but prolific in good fruits. Reports, full and scientific, should be made on all our summer and autumnal diseases, by observing in different parts of the state; the reading and discussion of which could not fail to be highly instructive. Such a meeting at the commencement would give an impetus to the society, that would carry it on to a higher respectability, than many similar societies have attained. Every county of the state, will, we trust, be represented in the meeting. All should come who are able to leave

home—those who can teach, prepared to do so; those who cannot, prepared to listen and be taught. But we should not encourage *elementary* instruction or *popular* harangues. The study of our endemic diseases, in their causes, peculiarities and treatment, is the legitimate object of the society; and should be steadily kept in view. Those who intend to read papers, ought not to defer the preparation of them to the last hour; but, by engaging in it at an early period, give to them the accuracy, fullness and finish, which are equally due to the society, the profession, and themselves. No one should preface his paper with an apology for any other imperfection, than the want of unattainable facts. D.

COUP DE SOLEIL, OR STROKE OF THE SUN.

We observe by the newspapers that Dr. Dowler of New Orleans, formerly of the state of Ohio, has dissected the bodies of two or three persons, who had died from exposure to the sun, and found the lungs, not the brain apoplectic. We write this paragraph, for the purpose of calling attention to cases of this kind. Their pathology has not been properly investigated, and we hope that such of our readers, as may have the opportunity, will not fail to note the symptoms and morbid appearances after death. D.

ABSENCE OF LACTEAL SECRETION AFTER PARTURITION.

Dr. W. S. Sutton of Georgetown, Ky., has communicated to us the following fact: There is now in that town a lady 60 years of age, who bore and reared eight children, without her breasts discharging a drop of milk after the birth of any one of them. The glands, when she was confined with a part of them, became somewhat swollen, but no milk flowed out. She never, at any period of her life, had a nipple on either breast. D.

FISTULA IN ANO. BY M. L. LINTON.

I flatter myself that the present communication, though a very brief one, will prove serviceable, not only to the profession, but to the public in general. Its design is to give notoriety to some important facts in regard to the treatment of *Fistula in Ano*—a disease, the treatment of which is as simple as any other in surgery, when the knife is to be used. But the horror which most persons have of cutting instruments, has very naturally led to the searching out and substituting of various other methods, amongst which is that by the ligature, which will do away with the necessity of the knife in nearly all if not all cases.

I do not say that it is better than the knife, but the truth is, that patients generally prefer it; and the surgeon is bound to regard their prejudices, when it can be done with safety.

We have lately treated two cases in this manner with perfect success.

The first was a negro woman, aged 25 years. She had been afflicted with the disease between six and seven years; and her health was considerably impaired. The fistula was complete. I introduced through the external orifice of the fistulous canal, by means of a slippery elm bougie, one end of a common flaxen cord, which I brought out at the end of the anus. The part to be cut through was thus included in the ligature, which I tied in a manner that I cannot very easily describe. No matter. The twisting of the two ends of the ligature, which should be well waxed, or tying them in what is called the single bow knot, answers as well as any other *can*.

The treatment from this time until a perfect cure was effected—the space of four weeks—consisted in tightening the cord every day or every other day—introducing, occasionally, into the fistulous canal a slippery elm bougie dipped in a solution of nitrate of silver, four grains to the ounce of water, keeping the bowels loose, and allaying irritation by an occasional opiate.

I attended this patient but little as she resided three miles from town—but her case was well and faithfully managed by my friend and pupil, J. R. Hughes, whose intelligence, industry, and zeal, justify hopes of future usefulness.

The second patient was a man upwards of thirty years of age. This case presented itself shortly after the termination of the foregoing.

My colleague, Dr. Polin, introduced a common silk thread, and proceeding in other respects as has already been described, until the cure was nearly effected, when the patient becoming very *impatient* the Doctor brought the knife to the aid of the ligature, though the latter would have done the work in a few more days.

As a general rule about three weeks are sufficient to effect a cure, in almost every case; for in the former of those just detailed, the fistula opened externally three inches from the anus; and in the latter the internal orifice was nearly three inches above the sphincter.

The fistula heals "pari passu" with the progress of the ligature, so that when the part is cut through the cure is completed. The use of the caustic is to destroy the deceased and indurated parietes of the fistulous canal. This may be left off after the first week, or it may be used for a week or so before the ligature is applied. In order that this mode of operating may produce but little pain and irritation, the ligature should be tightened frequently, and but *very little at each time.*

I have already said that I would not assert the superiority of the system over the knife; but it is well known that patients generally prefer it, and will follow a quack as long as they can hear of one who promises to cure without cutting.

The operation by ligature is as old as surgery itself. It is alluded to by Hippocrates—was in frequent use in the time of Celsus, and employed by surgeons in all ages from that to the present—some using wires of the various metals, some horse-hair, and some a common thread; yet this old operation is now being palmed upon the public as something entirely *new and secret,* by a Dr. Bodenhamer, of Paris, Ky. True he cures many of his cases, but then they might be equally well cured without the fatigue of a journey to Paris, and for a fee a great deal less than two hundred dollars. Any country physician or student, with the directions here given, can perform the operation as well as any one else.

I assert that this is substantially the operation of Bodenhamer on the authority of his own patients; and my only apology for making the communication is, that I am a friend to mankind, and a bitter enemy to nostrums and nostrum-mongers.

Springfield Ky, 1841.

A SCIENTIFIC HOAX.

A shower of "*flesh and blood*" was reported to have refreshed the "cedars of Lebanon," in Wilson county, Tennessee, about the middle of last August. Scientific gentlemen from a distance visited the spot where this singular shower descended, and reported, that the matter was veritable fat and muscle, such as might once have made a part of the living body of a hog. The story of the shower rested upon the testimony of some negroes who were at work in a tobacco field, and stated, that they saw the "red cloud" from which it fell "passing rapidly towards the West." The negroes, we have been informed, have since confessed, that this "flesh and blood" storm, like the enchantment of Dulcinea, by Sancho Panza, was a thing got up for their own amusement. The process was to scatter the putrefying carcass of a hog over the tobacco patch, particles of which, in the laboratory of our learned and excellent friend, Prof. Troost, were easily enough recognized as animal. Y.

MEDICAL JOURNALS.

We sometimes meet with the complaint in the papers of our contemporaries, that the Medical journals of the United States are too numerous. It may be that there are more than are well supported, either by the pens or the purses of the profession, but we are sure there are not more than the profession ought to support. What physician can hope to keep pace with the progress of medical science, who is not the reader of at least one medical journal? As well might the politician attempt to dispense with political newspapers. And yet, in every quarter, we meet with practitioners who are not only not subscribers to any journal of medicine, but who are not in the way of ever being one. Without persevering study, it is admitted, no one can become eminent in the medical profession, and nothing is a greater provocation to reading than these periodicals, which, coming to us monthly or quarterly, indicate the improvements and discoveries going forward in medicine in all parts of the world. Y.

CONTENTS

OF NO. V.

ORIGINAL COMMUNICATIONS.

ESSAYS AND CASES.

ART. I.—Observations on the epidemic Yellow Fever of Natchez, and of the South-west. By JOHN W. MONETTE, M. D. &c., of Washington, Mississippi. - - 331

ART. II.—A Case of remarkable and speedy recovery from severe injury of the Spinal Column. By SOLON BORLAND, M. D., of Memphis, Tenn. - - - 356

ART. III.—Cases of Scrofula cured by the Xanthoxylum Fraxineum. - - - - - - - 361

ART. IV.—History of a Case of long standing Spinal Irritation, successfully treated. By JOHN DAWSON, Jr., of Jamestown, Ohio. - - - - - 363

ART. V.—Ice in Cholera Infantum. By Dr. W. S. LAWRIE, of New Concord, Ky. - - - - 366

BIBLIOGRAPHICAL NOTICES.

ART. I.—A Treatise on the Cause of the Disease called by the People Milk Sickness; as it occurs in the Western and Southern States. By JOHN SIMPSON SEATON, M. D., of Jefferson County, Ky. Louisville: pp. 49. 368

ART. II.—Physiology and Animal Mechanism. Philadelphia; 1841: pp. 101. - - - - - - 371
ART. III.—Bulletin of the Proceedings of the National Institution for the promotion of Science. Established at Washington in 1840: pp. 65. - - - 372

SELECTIONS FROM AMERICAN AND FOREIGN JOURNALS.

Effect of Belladonna upon an Irritable Eye. - - 373
Ergot. - - - - - - - 374
Formulæ used in the Treatment of Tinea Capitis. - - 375
New Method of Applying Iodine for the Cure of Phthisis Pulmonalis. - - - - - - - 375
Inhalation of Conium and Iodine in Tubercular Phthisis Pulmonalis. - - - - - - - 375
Magendie's Method of treating Neuralgia. - - 378
On the Use of Ergot. - - - - - 380
Observations on Solar Asphyxia, Coup de Soleil or Sun Stroke. 384
Employment of Creosote for the cure of affections of the Eye. 394
Division of the Genio-hyo-glossi Muscles for Stammering. 395
Effects of Calculus in the Female Child. - - 396
Death by Irritation. - - - - - 398
Iodide of Potassium. - - - - - 398

ORIGINAL INTELLIGENCE.

Publication of Medical Books in connexion with this Journal. 399
Progress of Science. - - - - - 400
Sulphate of Quinine in Congestive Fever. - - 402
Urticaria. - - - - - - 403
Consultations through the Journal. - - - 404
Arsenic sold for Antimony.—Empoisoning. - - 405
Murrain of Cattle. - - - - - - 407
Tennessee Lunatic Asylum. - - - - 408
Electricity in Neuralgic Diseases. - - - 409
Death of Dr. Satterwhite. - - - - 409
Medical Institute of Louisville. - - - 410